NACOmatic

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Contact:
Doug Ranz
248-318-0011
NACOmatic@hotmail.com

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GENERAL INFORMATION

This Airport/Facility Directory is a Civil Flight Information Publication published and distributed every eight weeks by the FAA, Department of Transportation, National Aeronautical Navigation Services, Silver Spring, Maryland 20910. It is designed for use with Aeronautical Charts covering the conterminous United States, Puerto Rico and the Virgin Islands.

This directory contains all open to the public airports, seaplane bases and heliports, military facilities, and selected private use facilities specifically requested by the Department of Defense (DoD) for which a DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures Publication. Additionally, this directory contains communications data, navigational facilities and certain special notices and procedures.

Military data contained within this publication is provided by the National Geospatial–Intelligence Agency and is intended to provide reference data for military and/or joint civil/military airports. Not all military data contained in this publication is applicable to civil users.

CORRECTIONS, COMMENTS, AND/OR PROCUREMENT

CRITICAL information such as equipment malfunction, abnormal field conditions, hazards to flight, etc., should be reported as soon as possible to the nearest FAA facility, either in person or by reverse charge telephone call.

FOR AIRPORT SUPPLEMENT REVISIONS FORM VISIT WEB SITE: http://nfdc.faa.gov/portal/airportchanges.do

FAA, Aeronautical Information Services, ATO–R, Rm. 626
800 Independence Ave., SW
Washington, DC 20591
Telephone 1–866–295–8236
Fax 202–267–5322
Email 9–ATOR–HQ–AIS–AIRPORTCHANGES@FAA.GOV

NOTICE: Changes must be received by the Aeronautical Information Services as soon as possible but not later than the ''cut-off'' dates listed below to assure publication on the desired effective date.

Effective Date	Airport Information Cut-off date	Airspace Information* Cut-off date
8 Apr 10	24 Feb 10	4 Feb 10
3 Jun 10	21 Apr 10	1 Apr 10
29 Jul 10	16 Jun 10	27 May 10
23 Sep 10	11 Aug 10	22 Jul 10
18 Nov 10	6 Oct 10	16 Sep 10
13 Jan 11	1 Dec 10	11 Nov 10

*Including changes to preferred routes and graphic depictions on charts.

FOR CHARTING ERRORS CONTACT:

FAA, National Aeronautical Navigation Services
SSMC–4 Sta. #4259
1305 East West Highway
Silver Spring, MD 20910–3281
Telephone 1–800–626–3677
Email 9–AMC–Aerochart@faa.gov

Frequently asked questions (FAQs) are answered on our website at http://aeronav.faa.gov.
See the FAQs prior to contact via toll free number.

FOR PROCUREMENT CONTACT:

FAA, National Aeronautical Navigation Services
REDIS/Distribution Team
10201 Good Luck Road
Glenn Dale, MD 20769–9700
Online at http://aeronav.faa.gov
Email 9–AMC–Chartsales@faa.gov
Telephone 1–800–638–8972
Fax 301–436–6829
or any authorized chart agent.

New or Changed Information—To alert users of new information or changes to information from the previous issue, a vertical line will be portrayed in the outside margin and extending the full length of the new and/or revised data. This will not apply to the front cover or the airport/facility directory listing.

This Airport/Facility Directory comprises part of the following sections of the United States Aeronautical Information Publication (AIP): GEN, ENR and AD.

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ABBREVIATIONS

The following abbreviations/acronyms are those commonly used within this Directory. Other abbreviations/acronyms may be found in the Legend and are not duplicated below. The abbreviations presented are intended to represent grammatical variations of the basic form. (Example–''req'' may mean ''request'', ''requesting'', ''requested'', or ''requests'').

AAF	Army Air Field	byd	beyond
AB	Airbase	C	Commercial Circuit (Telephone)
abv	above	CGAF	Coast Guard Air Facility
ACC	Air Combat Command; Area Control Center	CGAS	Coast Guard Air Station
		CIV	Civil
acft	aircraft	clsd	closed
ADCC	Air Defense Control Center	comd	command
AER	approach end rwy	CONUS	Continental United States
AFB	Air Force Base	CSTMS	Customs
AFHP	Air Force Heliport	ctc	contact
afld	airfield	ctl	control
AFOD	US Army Flight Operations Detachment	dalgt	daylight
AFRC	Armed Forces Reserve Center/Air Force Reserve Command	Dec	December
		DIAP	DoD Instrument Approach Procedure
AFSS	Automated Flight Service Station	DoD	Department of Defense
AG	Agriculture	DSN	Defense Switching Network (Telephone)
A–GEAR	Arresting Gear	dsplcd	displaced
AGL	above ground level	durn	duration
AHP	Army heliport	eff	effective
ALS	Approach Light System	emerg	emergency
alt	altitude	EOR	End of Runway
AMC	Air Mobility Command	ETA	Estimated Time of Arrival
ANGS	Air National Guard Station	ETD	Estimated Time of Departure
apch	approach	exc	except
Apr	April	extd	extend
APU	Auxiliary Power Unit	FBO	fixed–base operator
ARB	Air Reserve Base	Feb	February
arpt	airport	fld	field
ARS	Air Reserve Station	FLIP	Flight Information Publication
AS	Air Station	flt	flight
ASDE–X	Airport Surface Detection Equipment—Model X	flw	follow
		Fri	Friday
ASU	Aircraft Starting Unit	FSS	Flight Service Station
ATC	Air Traffic Control	GA	glide angle
Aug	August	GCA	Ground Controlled Approach
AUW	All Up Weight (gross weight)	GS	glide slope
avbl	available	haz	hazard
bcn	beacon	HQ	Headquarters
blo	below		

CONTINUED ON NEXT PAGE

CONTINUED FROM PRECEDING PAGE

hr	hour
IAP	Instrument Approach Procedure
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules
ILS	Instrument Landing System
IM	Inner Marker
IMG	Immigration
incr	increase
indef	indefinite
ints	intensity
invof	in the vicinity of
IMC	Instrument Meteorological Conditions
Jan	January
JASU	Jet Aircraft Starting Unit
JOAP	Joint Oil Analysis Program
JOSAC	Joint Operational Support Airlift Center
JRB	Joint Reserve Base
Jul	July
Jun	June
Kt	Knots
LAA	Local Airport Advisory
LAHSO	Land and Hold Short Operations
lbs	pounds
ldg	landing
lgtd	lighted
lgts	lights
LMM	Compass locator at Middle Marker ILS
LOC	Localizer
LOM	Compass locator at Outer Marker ILS
ltd	limited
MACC	Military Area Control Center
Mar	March
MCAF	Marine Corps Air Facility
MCALF	Marine Corps Auxiliary Landing Field
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
med	medium
METRO	Pilot-to-Metro voice call
Mil	military
min	minute
MLS	Microwave Landing System
MM	Middle Marker of ILS
Mon	Monday
MP	Maintenance Period
MSL	mean sea level
MSAW	minimum safe altitude warning
NAAS	Naval Auxiliary Air Station
NADC	Naval Air Development Center
NADEP	Naval Air Depot
NAEC	Naval Air Engineering Center
NAES	Naval Air Engineering Station
NAF	Naval Air Facility
NALCO	Naval Air Logistics Control Office
NALO	Navy Air Logistics Office
NALF	Naval Auxiliary Landing Field
NAS	Naval Air Station
NAWC	Naval Air Warfare Center
NAWS	Naval Air Weapons Station
ngt	night
NOLF	Naval Outlying Field
Nov	November
npi	non precision instrument
NS ABTMT	Noise Abatement
NSTD	nonstandard
ntc	notice
obsn	observation
Oct	October
OLF	Outlying Field
opr	operate, operator, operational
ops	operations
OTS	out of service
ovrn	overrun
PAEW	personnel and equipment working
pat	pattern
p-line	power line
PMSV	Pilot-to-Metro Service
POL	Petrol, Oils and Lubricants
PPR	prior permission required
PRM	Precision Runway Monitoring
PTD	Pilot to Dispatcher
RAMCC	Regional Air Movement Control Center
req	request
rgt tfc	right traffic
RON	Remain Overnight
rqr	require
rstd	restricted
RSRS	reduced same runway separation
rwy	runway
Sat	Saturday
SELF	Strategic Expeditionary Landing Field
Sep	September
SFA	Single Frequency Approach
sfc	surface
SFRA	Special Flight Rules Area
SOAP	Spectrometric Oil Analysis Program
SOF	Supervisor of Flying
SPB	Seaplane Base
SR	sunrise
SS	sunset
std	standard
Sun	Sunday
svc	service
tfc	traffic
thld	threshold
Thu	Thursday
tkf	take-off
tmpry	temporary
tran	transient
Tue	Tuesday
twr	tower
twy	taxiway
UC	Under Construction
USA	United States Army
USAF	United States Air Force
USCG	United States Coast Guard
USN	United States Navy
V	Defense Switching Network (telephone, formerly AUTOVON)
VFR	Visual Flight Rules
VIP	Very Important Person
VMC	Visual Meteorological Conditions
Wed	Wednesday
wx	weather

SAMPLE

CITY NAME

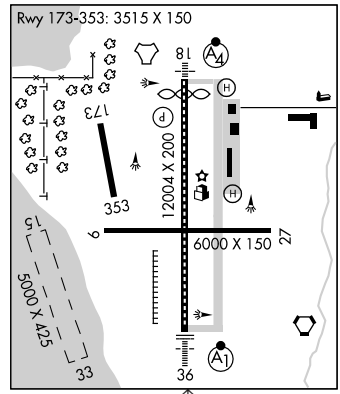
AIRPORT NAME (ALTERNATE NAME) (LTS) (KLTS) CIV/MIL 3 N UTC–6(–5DT) N34°41.93′ W99°20.20′ **JACKSONVILLE**
200 B S4 **FUEL** 100 0X 1 TPA—1000(800) AOE Class IV, ARFF Index A NOTAM FILE ORL Not insp. **COPTER**
H–4G, L–19C
IAP, DIAP, AD

(21) **RWY 18–36:** H12004X200 (ASPH–CONC–GRVD)
S–90, D–160, DT–300 PCN 80 R/B/W/T HIRL CL
RWY 18: LDIN. MALSF. TDZL. REIL. PAPI(P2R)—GA 3.0° TCH 36′.
Thld dsplcd 300′. Trees. Rgt tfc. 0.3% up.
RWY 36: ALSF1. 0.4% down.
RWY 09–27: H6000X150 (ASPH) MIRL
RWY 173–353: H3515X150 (ASPH–PFC) AUW PCN 59 F/A/W/T

LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 18	09–27	6500
RWY 36	09–27	5400

RUNWAY DECLARED DISTANCE INFORMATION
RWY 18: TORA–12004 TODA–12704 ASDA–11704 LDA–11504
RWY 36: TORA–12004 TODA–12004 ASDA–12004 LDA–11704



(22) **ARRESTING GEAR/SYSTEM**
RWY 18 → HOOK E5 (65′ OVRN) BAK–14 BAK–12B (1650′)
BAK–14 BAK–12 (B) (1087′) HOOK E5 (74′ OVRN) ← **RWY 36**

(23) **MILITARY SERVICE: A–GEAR** E–5 connected on dep end, disconnected on apch end. **JASU** 3(AM32A–60) 2(A/M32A–86)

(24)

(25) **FUEL** J8(Mil) (NC–100, A) **FLUID** W SP PRESAIR LOX (26)

OIL 0–128 **TRAN ALERT** Avbl 1300–0200Z‡, svc limited weekends.

(27) (28)

(10)

(29) **AIRPORT REMARKS:** Special Air Traffic Rules—Part 93, see Regulatory Notices. Attended 1200–0300Z‡. Parachute Jumping. Deer invof arpt. Heavy jumbo jet training surface to 9000′. Twy A clsd indef. Flight Notification Service (ADCUS) avbl.

(30) **MILITARY REMARKS: ANG** PPR/Official Business Only. Base OPS DSN 638–4390, C503–335–4222. Ctc Base OPS 15 minutes prior to ldg and after dep. Limited tran parking.

(31) **WEATHER DATA SOURCES:** AWOS–1 120.3 (202) 426–8000. LLWAS.

(32) **COMMUNICATIONS: SFA** **ATIS** 127.25 273.5 (202) 426–8003 **UNICOM** 122.95 **PTD** 372.2
NAME FSS (ORL) on arpt. 123.65 122.65 122.2
NAME RCO 112.2T 112.1R (NAME RADIO)
Ⓡ **NAME APP/DEP CON** 128.35 257.725 (1200–0400Z‡)
TOWER 119.65 255.6 (1200–0400Z‡) **GND CON** 121.7 **GCO** 135.075 (ORLANDO CLNC) **CLNC DEL** 125.55
NAME COMD POST (GERONIMO) 311.0 321.4 6761 **PMSV METRO** 239.8 **NAME OPS** 257.5

(33) **AIRSPACE: CLASS B** See VFR Terminal Area Chart.

(34) **RADIO AIDS TO NAVIGATION:** NOTAM FILE ORL. VHF/DF ctc FSS.
(H) VORTAC 112.2 MCO Chan 59 N28°32.55′ W81°20.12′ at fld. 1110/8E.
(H) TACAN Chan 29 CBU (109.2) N28°32.65′ W81°21.12′ at fld. 1115/8E.
HERNY NDB (LOM) 221 OR N28°37.40′ W81°21.05′ 177° 5.4 NM to fld.
ILS/DME 108.5 I–ORL Chan 22 Rwy 18. Class IIE. LOM HERNY NDB.
ASR/PAR (1200–0400Z‡)

(35) **COMM/NAV/WEATHER REMARKS:** Emerg frequency 121.5 not avbl at twr.

HELIPAD H1: H100X75 (ASPH)
HELIPAD H2: H60X60 (ASPH)
HELIPORT REMARKS: Helipad H1 lctd on general aviation side and H2 lctd on air carrier side of arpt.

(1)

187 TPA 1000(813)
WATERWAY 15–33: 5000X425 (WATER)
SEAPLANE REMARKS: Birds roosting and feeding areas along river banks. Seaplanes operating adjacent to SW side of arpt not visible from twr and are required to ctc twr.

All bearings and radials are magnetic unless otherwise specified.
All mileages are nautical unless otherwise noted.
All times are Coordinated Universal Time (UTC) except as noted.
All elevations are in feet above/below Mean Sea Level (MSL) unless otherwise noted.
The horizontal reference datum of this publication is North American Datum of 1983 (NAD83), which for charting purposes is considered equivalent to World Geodetic System 1984 (WGS 84).

(10)

SKETCH LEGEND

RUNWAYS/LANDING AREAS

Hard Surfaced

Metal Surface

Sod, Gravel, etc.

Light Plane, ...
Ski Landing Area or Water

Under Construction

Closed

Helicopter Landings Area (H)

Displaced Threshold

Taxiway, Apron and Stopways . .

MISCELLANEOUS BASE AND CULTURAL FEATURES

Buildings

Power Lines —T——T—

Fence

Towers

Tanks

Oil Well

Smoke Stack

Obstruction 5812

Controlling Obstruction +5812

Trees

Populated Places

Cuts and Fills Cut Fill

Cliffs and Depressions . .

Ditch

Hill

RADIO AIDS TO NAVIGATION

VORTAC . . . VOR

VOR/DME . . NDB

TACAN NDB/DME

MISCELLANEOUS AERONAUTICAL FEATURES

Airport Beacon

Wind Cone

Landing Tee

Tetrahedron

Control Tower

APPROACH LIGHTING SYSTEMS

A dot " • " portrayed with approach lighting letter identifier indicates sequenced flashing lights (F) installed with the approach lighting system e.g. (A1) Negative symbology, e.g., (A1) (V) indicates Pilot Controlled Lighting (PCL).

Runway Centerline Lighting

(A) Approach Lighting System ALSF-2 . .

(A1) Approach Lighting System ALSF-1 . .

(A2) Short Approach Lighting System SALS/SALSF

(A3) Simplified Short Approach Lighting System (SSALR) with RAIL

(A4) Medium Intensity Approach Lighting System (MALS and MALSF)/(SSALS and SSALF)

(A5) Medium Intensity Approach Lighting System (MALSR) and RAIL

Omnidirectional Approach Lighting System (ODALS)

(D) Navy Parallel Row and Cross Bar . . .

(‡) Air Force Overrun

(V) Visual Approach Slope Indicator with Standard Threshold Clearance provided

(V2) Pulsating Visual Approach Slope Indicator (PVASI)

(V3) Visual Approach Slope Indicator with a threshold crossing height to accomodate long bodied or jumbo aircraft

(V4) Tri-color Visual Approach Slope Indicator (TRCV)

(V5) Approach Path Alignment Panel (APAP)

(P) Precision Approach Path Indicator (PAPI)

LEGEND

This directory is a listing of data on record with the FAA on all open to the public airports, military facilities and selected private use facilities specifically requested by the Department of Defense (DoD) for which a DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures Publication. Additionally this listing contains data for associated terminal control facilities, air route traffic control centers, and radio aids to navigation within the conterminous United States, Puerto Rico and the Virgin Islands. Joint civil/military and civil airports are listed alphabetically by state, associated city and airport name and cross-referenced by airport name. Military facilities are listed alphabetically by state and official airport name and cross-referenced by associated city name. Navaids, flight service stations and remote communication outlets that are associated with an airport, but with a different name, are listed alphabetically under their own name, as well as under the airport with which they are associated.

The listing of an open to the public airport in this directory merely indicates the airport operator's willingness to accommodate transient aircraft, and does not represent that the facility conforms with any Federal or local standards, or that it has been approved for use on the part of the general public. Military and private use facilities published in this directory are open to civil pilots only in an emergency or with prior permission. See Special Notice Section, Civil Use of Military Fields.

The information on obstructions is taken from reports submitted to the FAA. Obstruction data has not been verified in all cases. Pilots are cautioned that objects not indicated in this tabulation (or on the airports sketches and/or charts) may exist which can create a hazard to flight operation. Detailed specifics concerning services and facilities tabulated within this directory are contained in the Aeronautical Information Manual, Basic Flight Information and ATC Procedures.

The legend items that follow explain in detail the contents of this Directory and are keyed to the circled numbers on the sample on the preceding pages.

(1) CITY/AIRPORT NAME

Civil and joint civil/military airports and facilities in this directory are listed alphabetically by state and associated city. Where the city name is different from the airport name the city name will appear on the line above the airport name. Airports with the same associated city name will be listed alphabetically by airport name and will be separated by a dashed rule line. A solid rule line will separate all others. FAA approved helipads and seaplane landing areas associated with a land airport will be separated by a dotted line. Military airports are listed alphabetically by state and official airport name.

(2) ALTERNATE NAME

Alternate names, if any, will be shown in parentheses.

(3) LOCATION IDENTIFIER

The location identifier is a three or four character FAA code followed by a four-character ICAO code assigned to airports. ICAO codes will only be published at joint civil/military, and military facilities. If two different military codes are assigned, both codes will be shown with the primary operating agency's code listed first. These identifiers are used by ATC in lieu of the airport name in flight plans, flight strips and other written records and computer operations. Zeros will appear with a slash to differentiate them from the letter ''O''.

(4) OPERATING AGENCY

Airports within this directory are classified into two categories, Military/Federal Government and Civil airports open to the general public, plus selected private use airports. The operating agency is shown for military, private use and joint civil/military airports. The operating agency is shown by an abbreviation as listed below. When an organization is a tenant, the abbreviation is enclosed in parenthesis. No classification indicates the airport is open to the general public with no military tenant.

A	US Army	MC	Marine Corps
AFRC	Air Force Reserve Command	N	Navy
AF	US Air Force	NAF	Naval Air Facility
ANG	Air National Guard	NAS	Naval Air Station
AR	US Army Reserve	NASA	National Air and Space Administration
ARNG	US Army National Guard	P	US Civil Airport Wherein Permit Covers Use by Transient Military Aircraft
CG	US Coast Guard		
CIV/MIL	Joint Use Civil/Military	PVT	Private Use Only (Closed to the Public)
DND	Department of National Defense Canada		

(5) AIRPORT LOCATION

Airport location is expressed as distance and direction from the center of the associated city in nautical miles and cardinal points, e.g., 4 NE.

(6) TIME CONVERSION

Hours of operation of all facilities are expressed in Coordinated Universal Time (UTC) and shown as ''Z'' time. The directory indicates the number of hours to be subtracted from UTC to obtain local standard time and local daylight saving time UTC–5(–4DT). The symbol ‡ indicates that during periods of Daylight Saving Time effective hours will be one hour earlier than shown. In those areas where daylight saving time is not observed the (–4DT) and ‡ will not be shown. Daylight saving time is in effect from 0200 local time the second Sunday in March to 0200 local time the first Sunday in November. Canada and all U.S. Conterminous States observe daylight saving time except Arizona and Puerto Rico, and the Virgin Islands. If the state observes daylight saving time and the operating times are other than daylight saving times, the operating hours will include the dates, times and no ‡ symbol will be shown, i.e., April 15–Aug 31 0630–1700Z, Sep 1–Apr 14 0600–1700Z.

⑦ GEOGRAPHIC POSITION OF AIRPORT—AIRPORT REFERENCE POINT (ARP)

Positions are shown as hemisphere, degrees, minutes and hundredths of a minute and represent the approximate geometric center of all usable runway surfaces.

⑧ CHARTS

Charts refer to the Sectional Chart and Low and High Altitude Enroute Chart and panel on which the airport or facility is located. Helicopter Chart locations will be indicated as COPTER. IFR Gulf of Mexico West and IFR Gulf of Mexico Central will be depicted as GOMW and GOMC.

⑨ INSTRUMENT APPROACH PROCEDURES, AIRPORT DIAGRAMS

IAP indicates an airport for which a prescribed (Public Use) FAA Instrument Approach Procedure has been published. DIAP indicates an airport for which a prescribed DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures. See the Special Notice Section of this directory, Civil Use of Military Fields and the Aeronautical Information Manual 5–4–5 Instrument Approach Procedure Charts for additional information. AD indicates an airport for which an airport diagram has been published. Airport diagrams are located in the back of each A/FD volume alphabetically by associated city and airport name.

⑩ AIRPORT SKETCH

The airport sketch, when provided, depicts the airport and related topographical information as seen from the air and should be used in conjunction with the text. It is intended as a guide for pilots in VFR conditions. Symbology that is not self-explanatory will be reflected in the sketch legend. The airport sketch will be oriented with True North at the top. Airport sketches will be added incrementally.

⑪ ELEVATION

The highest point of an airport's usable runways measured in feet from mean sea level. When elevation is sea level it will be indicated as ''00''. When elevation is below sea level a minus ''−'' sign will precede the figure.

⑫ ROTATING LIGHT BEACON

B indicates rotating beacon is available. Rotating beacons operate sunset to sunrise unless otherwise indicated in the AIRPORT REMARKS or MILITARY REMARKS segment of the airport entry.

⑬ SERVICING—CIVIL

S1: Minor airframe repairs.
S2: Minor airframe and minor powerplant repairs.
S3: Major airframe and minor powerplant repairs.
S4: Major airframe and major powerplant repairs.
S5: Major airframe repairs.
S6: Minor airframe and major powerplant repairs.
S7: Major powerplant repairs.
S8: Minor powerplant repairs.

⑭ FUEL

CODE	FUEL
80	Grade 80 gasoline (Red)
100	Grade 100 gasoline (Green)
100LL	100LL gasoline (low lead) (Blue)
115	Grade 115 gasoline (115/145 military specification) (Purple)
A	Jet A, Kerosene, without FS–II*, FP** minus 40° C.
A+	Jet A, Kerosene, with FS–II*, FP** minus 40°C.
A1	Jet A–1, Kerosene, without FS–II*, FP** minus 47°C.
A1+	Jet A–1, Kerosene with FS–II*, FP** minus 47° C.
B	Jet B, Wide-cut, turbine fuel without FS–II*, FP** minus 50° C.
B+	Jet B, Wide-cut, turbine fuel with FS–II*, FP** minus 50° C.
J4 (JP4)	(JP–4 military specification) FP** minus 58° C.
J5 (JP5)	(JP–5 military specification) Kerosene with FS–11, FP** minus 46°C.
J8 (JP8)	(JP–8 military specification) Jet A–1, Kerosene with FS–II*, FP** minus 47°C.
J8+100	(JP–8 military specification) Jet A–1, Kerosene with FS–II*, FP** minus 47°C, with-fuel additive package that improves thermo stability characteristics of JP–8.
J	(Jet Fuel Type Unknown)
MOGAS	Automobile gasoline which is to be used as aircraft fuel.

*(Fuel System Icing Inhibitor)
**(Freeze Point)

NOTE: Certain automobile gasoline may be used in specific aircraft engines if a FAA supplemental type certificate has been obtained. Automobile gasoline, which is to be used in aircraft engines, will be identified as ''MOGAS'', however, the grade/type and other octane rating will not be published.

Data shown on fuel availability represents the most recent information the publisher has been able to acquire. Because of a variety of factors, the fuel listed may not always be obtainable by transient civil pilots. Confirmation of availability of fuel should be made directly with fuel suppliers at locations where refueling is planned.

⑮ OXYGEN—CIVIL

OX 1 High Pressure
OX 2 Low Pressure
OX 3 High Pressure—Replacement Bottles
OX 4 Low Pressure—Replacement Bottles

⑯ TRAFFIC PATTERN ALTITUDE

Traffic Pattern Altitude (TPA)—The first figure shown is TPA above mean sea level. The second figure in parentheses is TPA above airport elevation. Multiple TPA shall be shown as ''TPA—See Remarks'' and detailed information shall be shown in the Airport or Military Remarks Section. Traffic pattern data for USAF bases, USN facilities, and U.S. Army airports (including those on which ACC or U.S. Army is a tenant) that deviate from standard pattern altitudes shall be shown in Military Remarks.

⑰ AIRPORT OF ENTRY, LANDING RIGHTS, AND CUSTOMS USER FEE AIRPORTS

U.S. CUSTOMS USER FEE AIRPORT—Private Aircraft operators are frequently required to pay the costs associated with customs processing.

AOE—Airport of Entry. A customs Airport of Entry where permission from U.S. Customs is not required to land. However, at least one hour advance notice of arrival is required.

LRA—Landing Rights Airport. Application for permission to land must be submitted in advance to U.S. Customs. At least one hour advance notice of arrival is required.

NOTE: Advance notice of arrival at both an AOE and LRA airport may be included in the flight plan when filed in Canada or Mexico. Where Flight Notification Service (ADCUS) is available the airport remark will indicate this service. This notice will also be treated as an application for permission to land in the case of an LRA. Although advance notice of arrival may be relayed to Customs through Mexico, Canada, and U.S. Communications facilities by flight plan, the aircraft operator is solely responsible for ensuring that Customs receives the notification. (See Customs, Immigration and Naturalization, Public Health and Agriculture Department requirements in the International Flight Information Manual for further details.)

US Customs Air and Sea Ports, Inspectors and Agents

Northeast Sector (New England and Atlantic States—ME to MD)	407–975–1740
Southeast Sector (Atlantic States—DC, WV, VA to FL)	407–975–1780
Central Sector (Interior of the US, including Gulf states—MS, AL, LA)	407–975–1760
Southwest East Sector (OK and eastern TX)	407–975–1840
Southwest West Sector (Western TX, NM and AZ)	407–975–1820
Pacific Sector (WA, OR, CA, HI and AK)	407–975–1800

⑱ CERTIFICATED AIRPORT (14 CFR PART 139)

Airports serving Department of Transportation certified carriers and certified under 14 CFR part 139 are indicated by the Class and the ARFF Index; e.g. Class I, ARFF Index A, which relates to the availability of crash, fire, rescue equipment. Class I airports can have an ARFF Index A through E, depending on the aircraft length and scheduled departures. Class II, III, and IV will always carry an Index A.

14 CFR PART 139 CERTIFICATED AIRPORTS
AIRPORT CLASSIFICATIONS

Type of Air Carrier Operation	Class I	Class II	Class III	Class IV
Scheduled Air Carrier Aircraft with 31 or more passenger seats	X			
Unscheduled Air Carrier Aircraft with 31 or more passengers seats	X	X		X
Scheduled Air Carrier Aircraft with 10 to 30 passenger seats	X	X	X	

14 CFR–PART 139 CERTIFICATED AIRPORTS

INDICES AND AIRCRAFT RESCUE AND FIRE FIGHTING EQUIPMENT REQUIREMENTS

Airport Index	*Required No. Vehicles*	*Aircraft Length*	*Scheduled Departures*	*Agent + Water for Foam*
A	1	<90′	≥1	500#DC or HALON 1211 or 450#DC + 100 gal H_2O
B	1 or 2	≥90′, <126′	≥5	Index A + 1500 gal H_2O
		≥126′, <159′	<5	
C	2 or 3	≥126′, <159′	≥5	Index A + 3000 gal H_2O
		≥159′, <200′	<5	
D	3	≥159′, <200′		Index A + 4000 gal H_2O
		>200′	<5	
E	3	≥200′	≥5	Index A + 6000 gal H_2O

> Greater Than; < Less Than; ≥ Equal or Greater Than; ≤ Equal or Less Than; H_2O–Water; DC–Dry Chemical.

NOTE: The listing of ARFF index does not necessarily assure coverage for non-air carrier operations or at other than prescribed times for air carrier. ARFF Index Ltd.—indicates ARFF coverage may or may not be available, for information contact airport manager prior to flight.

⑲ NOTAM SERVICE

All public use landing areas are provided NOTAM ''D'' (distant dissemination) and NOTAM ''L'' (local dissemination) service. Airport NOTAM file identifier is shown for individual airports, e.g. ''NOTAM FILE IAD''. See AIM, Basic Flight Information and

ATC Procedures for detailed description of NOTAM's. Current NOTAMs are available from Flight Service Stations at 1–800–WX–BRIEF. Real time Military NOTAMs are available using the DoD Internet NOTAM Distribution System (DINS) www.notams.jcs.mil.

⑳ FAA INSPECTION

All airports not inspected by FAA will be identified by the note: Not insp. This indicates that the airport information has been provided by the owner or operator of the field.

㉑ RUNWAY DATA

Runway information is shown on two lines. That information common to the entire runway is shown on the first line while information concerning the runway ends is shown on the second or following line. Runway direction, surface, length, width, weight bearing capacity, lighting, and slope, when available are shown for each runway. Multiple runways are shown with the longest runway first. Direction, length, width, and lighting are shown for sea-lanes. The full dimensions of helipads are shown, e.g., 50X150. Runway data that requires clarification will be placed in the remarks section.

RUNWAY DESIGNATION

Runways are normally numbered in relation to their magnetic orientation rounded off to the nearest 10 degrees. Parallel runways can be designated L (left)/R (right)/C (center). Runways may be designated as Ultralight or assault strips. Assault strips are shown by magnetic bearing.

RUNWAY DIMENSIONS

Runway length and width are shown in feet. Length shown is runway end to end including displaced thresholds, but excluding those areas designed as overruns.

RUNWAY SURFACE AND LENGTH

Runway lengths prefixed by the letter ''H'' indicate that the runways are hard surfaced (concrete, asphalt, or part asphalt–concrete). If the runway length is not prefixed, the surface is sod, clay, etc. The runway surface composition is indicated in parentheses after runway length as follows:

(AFSC)—Aggregate friction seal coat
(ASPH)—Asphalt
(CONC)—Concrete
(DIRT)—Dirt
(GRVD)—Grooved
(GRVL)—Gravel, or cinders
(MATS)—Pierced steel planking, landing mats, membranes
(PEM)—Part concrete, part asphalt
(PFC)—Porous friction courses
(PSP)—Pierced steel plank
(RFSC)—Rubberized friction seal coat
(TURF)—Turf
(TRTD)—Treated
(WC)—Wire combed

RUNWAY WEIGHT BEARING CAPACITY

Runway strength data shown in this publication is derived from available information and is a realistic estimate of capability at an average level of activity. It is not intended as a maximum allowable weight or as an operating limitation. Many airport pavements are capable of supporting limited operations with gross weights in excess of the published figures. Permissible operating weights, insofar as runway strengths are concerned, are a matter of agreement between the owner and user. When desiring to operate into any airport at weights in excess of those published in the publication, users should contact the airport management for permission. Runway strength figures are shown in thousand of pounds, with the last three figures being omitted. Add 000 to figure following S, D, 2S, 2T, AUW, SWL, etc., for gross weight capacity. A blank space following the letter designator is used to indicate the runway can sustain aircraft with this type landing gear, although definite runway weight bearing capacity figures are not available, e.g., S, D. Applicable codes for typical gear configurations with S=Single, D=Dual, T=Triple and Q=Quadruple:

CURRENT	NEW	NEW DESCRIPTION
S	S	Single wheel type landing gear (DC3), (C47), (F15), etc.
D	D	Dual wheel type landing gear (BE1900), (B737), (A319), etc.
T	D	Dual wheel type landing gear (P3, C9).
ST	2S	Two single wheels in tandem type landing gear (C130).
TRT	2T	Two triple wheels in tandem type landing gear (C17), etc.
DT	2D	Two dual wheels in tandem type landing gear (B707), etc.
TT	2D	Two dual wheels in tandem type landing gear (B757, KC135).
SBTT	2D/D1	Two dual wheels in tandem/dual wheel body gear type landing gear (KC10).
None	2D/2D1	Two dual wheels in tandem/two dual wheels in tandem body gear type landing gear (A340–600).
DDT	2D/2D2	Two dual wheels in tandem/two dual wheels in double tandem body gear type landing gear (B747, E4).
TTT	3D	Three dual wheels in tandem type landing gear (B777), etc.
TT	D2	Dual wheel gear two struts per side main gear type landing gear (B52).
TDT	C5	Complex dual wheel and quadruple wheel combination landing gear (C5).

AUW—All up weight. Maximum weight bearing capacity for any aircraft irrespective of landing gear configuration.
SWL—Single Wheel Loading. (This includes information submitted in terms of Equivalent Single Wheel Loading (ESWL) and Single Isolated Wheel Loading).
PSI—Pounds per square inch. PSI is the actual figure expressing maximum pounds per square inch runway will support, e.g., (SWL 000/PSI 535).

Omission of weight bearing capacity indicates information unknown.

The ACN/PCN System is the ICAO standard method of reporting pavement strength for pavements with bearing strengths greater than 12,500 pounds. The Pavement Classification Number (PCN) is established by an engineering assessment of the runway. The PCN is for use in conjunction with an Aircraft Classification Number (ACN). Consult the Aircraft Flight Manual, Flight Information Handbook, or other appropriate source for ACN tables or charts. Currently, ACN data may not be available for all aircraft. If an ACN table or chart is available, the ACN can be calculated by taking into account the aircraft weight, the pavement type, and the subgrade category. For runways that have been evaluated under the ACN/PCN system, the PCN will be shown as a five-part code (e.g. PCN 80 R/B/W/T). Details of the coded format are as follows:

(1) The PCN NUMBER—The reported PCN indicates that an aircraft with an ACN equal or less than the reported PCN can operate on the pavement subject to any limitation on the tire pressure.

(2) The type of pavement:
R — Rigid
F — Flexible

(3) The pavement subgrade category:
A — High
B — Medium
C — Low
D — Ultra-low

(4) The maximum tire pressure authorized for the pavement:
W — High, no limit
X — Medium, limited to 217 psi
Y — Low, limited to 145 psi
Z — Very low, limited to 73 psi

(5) Pavement evaluation method:
T — Technical evaluation
U — By experience of aircraft using the pavement

NOTE: Prior permission from the airport controlling authority is required when the ACN of the aircraft exceeds the published PCN or aircraft tire pressure exceeds the published limits.

RUNWAY LIGHTING

Lights are in operation sunset to sunrise. Lighting available by prior arrangement only or operating part of the night and/or pilot controlled lighting with specific operating hours are indicated under airport or military remarks. At USN/USMC facilities lights are available only during airport hours of operation. Since obstructions are usually lighted, obstruction lighting is not included in this code. Unlighted obstructions on or surrounding an airport will be noted in airport or military remarks. Runway lights nonstandard (NSTD) are systems for which the light fixtures are not FAA approved L-800 series: color, intensity, or spacing does not meet FAA standards. Nonstandard runway lights, VASI, or any other system not listed below will be shown in airport remarks or military service. Temporary, emergency or limited runway edge lighting such as flares, smudge pots, lanterns or portable runway lights will also be shown in airport remarks or military service. Types of lighting are shown with the runway or runway end they serve.

NSTD—Light system fails to meet FAA standards.
LIRL—Low Intensity Runway Lights.
MIRL—Medium Intensity Runway Lights.
HIRL—High Intensity Runway Lights.
RAIL—Runway Alignment Indicator Lights.
REIL—Runway End Identifier Lights.
CL—Centerline Lights.
TDZL—Touchdown Zone Lights.
ODALS—Omni Directional Approach Lighting System.
AF OVRN—Air Force Overrun 1000′ Standard Approach Lighting System.
LDIN—Lead-In Lighting System.
MALS—Medium Intensity Approach Lighting System.
MALSF—Medium Intensity Approach Lighting System with Sequenced Flashing Lights.
MALSR—Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights.
SALS—Short Approach Lighting System.
SALSF—Short Approach Lighting System with Sequenced Flashing Lights.
SSALS—Simplified Short Approach Lighting System.
SSALF—Simplified Short Approach Lighting System with Sequenced Flashing Lights.
SSALR—Simplified Short Approach Lighting System with Runway Alignment Indicator Lights.
ALSAF—High Intensity Approach Lighting System with Sequenced Flashing Lights.
ALSF1—High Intensity Approach Lighting System with Sequenced Flashing Lights, Category I, Configuration.
ALSF2—High Intensity Approach Lighting System with Sequenced Flashing Lights, Category II, Configuration.
SF—Sequenced Flashing Lights.
OLS—Optical Landing System.
WAVE–OFF.

NOTE: Civil ALSF2 may be operated as SSALR during favorable weather conditions. When runway edge lights are positioned more than 10 feet from the edge of the usable runway surface a remark will be added in the ''Remarks'' portion of the airport entry. This is applicable to Air Force, Air National Guard and Air Force Reserve Bases, and those joint civil/military airfields on which they are tenants.

VISUAL GLIDESLOPE INDICATORS

APAP—A system of panels, which may or may not be lighted, used for alignment of approach path.

PNIL	APAP on left side of runway	PNIR	APAP on right side of runway

PAPI—Precision Approach Path Indicator

P2L	2-identical light units placed on left side of runway	P4L	4-identical light units placed on left side of runway
P2R	2-identical light units placed on right side of runway	P4R	4-identical light units placed on right side of runway

PVASI—Pulsating/steady burning visual approach slope indicator, normally a single light unit projecting two colors.

PSIL	PVASI on left side of runway	PSIR	PVASI on right side of runway

SAVASI—Simplified Abbreviated Visual Approach Slope Indicator

S2L	2-box SAVASI on left side of runway	S2R	2-box SAVASI on right side of runway

TRCV—Tri-color visual approach slope indicator, normally a single light unit projecting three colors.

TRIL	TRCV on left side of runway	TRIR	TRCV on right side of runway

VASI—Visual Approach Slope Indicator

V2L	2-box VASI on left side of runway	V6L	6-box VASI on left side of runway
V2R	2-box VASI on right side of runway	V6R	6-box VASI on right side of runway
V4L	4-box VASI on left side of runway	V12	12-box VASI on both sides of runway
V4R	4-box VASI on right side of runway	V16	16-box VASI on both sides of runway

NOTE: Approach slope angle and threshold crossing height will be shown when available; i.e., –GA 3.5° TCH 37′.

PILOT CONTROL OF AIRPORT LIGHTING

Key Mike	Function
7 times within 5 seconds	Highest intensity available
5 times within 5 seconds	Medium or lower intensity (Lower REIL or REIL-Off)
3 times within 5 seconds	Lowest intensity available (Lower REIL or REIL-Off)

Available systems will be indicated in the airport or military remarks, e.g., ACTIVATE HIRL Rwy 07–25, MALSR Rwy 07, and VASI Rwy 07—122.8.

Where the airport is not served by an instrument approach procedure and/or has an independent type system of different specification installed by the airport sponsor, descriptions of the type lights, method of control, and operating frequency will be explained in clear text. See AIM, ''Basic Flight Information and ATC Procedures,'' for detailed description of pilot control of airport lighting.

RUNWAY SLOPE

When available, runway slope data will only be provided for those airports with an approved FAA instrument approach procedure. Runway slope will be shown only when it is 0.3 percent or greater. On runways less than 8000 feet, the direction of the slope up will be indicated, e.g., 0.3% up NW. On runways 8000 feet or greater, the slope will be shown (up or down) on the runway end line, e.g., RWY 13: 0.3% up., RWY 21: Pole. Rgt tfc. 0.4% down.

RUNWAY END DATA

Information pertaining to the runway approach end such as approach lights, touchdown zone lights, runway end identification lights, visual glideslope indicators, displaced thresholds, controlling obstruction, and right hand traffic pattern, will be shown on the specific runway end. ''Rgt tfc''—Right traffic indicates right turns should be made on landing and takeoff for specified runway end.

LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for ''Land and Hold Short Operations.'' These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold–short operations and markings.

RUNWAY DECLARED DISTANCE INFORMATION

TORA—Take-off Run Available. The length of runway declared available and suitable for the ground run of an aeroplane take–off.

TODA—Take-off Distance Available. The length of the take–off run available plus the length of the clearway, if provided.

ASDA—Accelerate-Stop Distance Available. The length of the take–off run available plus the length of the stopway, if provided.

LDA—Landing Distance Available. The length of runway which is declared available and suitable for the ground run of an aeroplane landing.

(22) ARRESTING GEAR/SYSTEMS

Arresting gear is shown as it is located on the runway. The a–gear distance from the end of the appropriate runway (or into the overrun) is indicated in parentheses. A–Gear which has a bi–direction capability and can be utilized for emergency approach end engagement is indicated by a (B). The direction of engaging device is indicated by an arrow. Up to 15 minutes advance notice may be required for rigging A–Gear for approach and engagement. Airport listing may show availability of other than US Systems. This information is provided for emergency requirements only. Refer to current aircraft operating manuals for specific engagement weight and speed criteria based on aircraft structural restrictions and arresting system limitations.

Following is a list of current systems referenced in this publication identified by both Air Force and Navy terminology:

BI–DIRECTIONAL CABLE (B)

TYPE	DESCRIPTION
BAK–9	Rotary friction brake.
BAK–12A	Standard BAK–12 with 950 foot run out, 1–inch cable and 40,000 pound weight setting. Rotary friction brake.
BAK–12B	Extended BAK–12 with 1200 foot run, 1¼ inch Cable and 50,000 pounds weight setting. Rotary friction brake.
E28	Rotary Hydraulic (Water Brake).
M21	Rotary Hydraulic (Water Brake) Mobile.

The following device is used in conjunction with some aircraft arresting systems:

BAK–14	A device that raises a hook cable out of a slot in the runway surface and is remotely positioned for engagement by the tower on request. (In addition to personnel reaction time, the system requires up to five seconds to fully raise the cable.)
H	A device that raises a hook cable out of a slot in the runway surface and is remotely positioned for engagement by the tower on request. (In addition to personnel reaction time, the system requires up to one and one–half seconds to fully raise the cable.)

UNI–DIRECTIONAL CABLE

TYPE	DESCRIPTION
MB60	Textile brake—an emergency one–time use, modular braking system employing the tearing of specially woven textile straps to absorb the kinetic energy.
E5/E5–1/E5–3	Chain Type. At USN/USMC stations E–5 A–GEAR systems are rated, e.g., E–5 RATING–13R–1100 HW (DRY), 31L/R–1200 STD (WET). This rating is a function of the A–GEAR chain weight and length and is used to determine the maximum aircraft engaging speed. A dry rating applies to a stabilized surface (dry or wet) while a wet rating takes into account the amount (if any) of wet overrun that is not capable of withstanding the aircraft weight. These ratings are published under Military Service.

FOREIGN CABLE

TYPE	DESCRIPTION	US EQUIVALENT
44B–3H	Rotary Hydraulic) (Water Brake)	
CHAG	Chain	E–5

UNI–DIRECTIONAL BARRIER

TYPE	DESCRIPTION
MA–1A	Web barrier between stanchions attached to a chain energy absorber.
BAK–15	Web barrier between stanchions attached to an energy absorber (water squeezer, rotary friction, chain). Designed for wing engagement.

NOTE: Landing short of the runway threshold on a runway with a BAK–15 in the underrun is a significant hazard. The barrier in the down position still protrudes several inches above the underrun. Aircraft contact with the barrier short of the runway threshold can cause damage to the barrier and substantial damage to the aircraft.

OTHER

TYPE	DESCRIPTION
EMAS	Engineered Material Arresting System, located beyond the departure end of the runway, consisting of high energy absorbing materials which will crush under the weight of an aircraft.

(23) MILITARY SERVICE

Specific military services available at the airport are listed under this general heading. Remarks applicable to any military service are shown in the individual service listing.

(24) JET AIRCRAFT STARTING UNITS (JASU)

The numeral preceding the type of unit indicates the number of units available. The absence of the numeral indicates ten or more units available. If the number of units is unknown, the number one will be shown. Absence of JASU designation indicates non–availability.

The following is a list of current JASU systems referenced in this publication:

USAF JASU (For variations in technical data, refer to T.O. 35–1–7.)

ELECTRICAL STARTING UNITS:

A/M32A–86	AC: 115/200v, 3 phase, 90 kva, 0.8 pf, 4 wire DC: 28v, 1500 amp, 72 kw (with TR pack)
MC–1A	AC: 115/208v, 400 cycle, 3 phase, 37.5 kva, 0.8 pf, 108 amp, 4 wire DC: 28v, 500 amp, 14 kw
MD–3	AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire DC: 28v, 1500 amp, 45 kw, split bus
MD–3A	AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire DC: 28v, 1500 amp, 45 kw, split bus
MD–3M	AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire DC: 28v, 500 amp, 15 kw

MD–4	AC: 120/208v, 400 cycle, 3 phase, 62.5 kva, 0.8 pf, 175 amp, ''WYE'' neutral ground, 4 wire, 120v, 400 cycle, 3 phase, 62.5 kva, 0.8 pf, 303 amp, ''DELTA'' 3 wire, 120v, 400 cycle, 1 phase, 62.5 kva, 0.8 pf, 520 amp, 2 wire
AIR STARTING UNITS	
AM32–95	150 +/− 5 lb/min (2055 +/− 68 cfm) at 51 +/− 2 psia
AM32A–95	150 +/− 5 lb/min @ 49 +/− 2 psia (35 +/− 2 psig)
LASS	150 +/− 5 lb/min @ 49 +/− 2 psia
MA–1A	82 lb/min (1123 cfm) at 130° air inlet temp, 45 psia (min) air outlet press
MC–1	15 cfm, 3500 psia
MC–1A	15 cfm, 3500 psia
MC–2A	15 cfm, 200 psia
MC–11	8,000 cu in cap, 4000 psig, 15 cfm
COMBINED AIR AND ELECTRICAL STARTING UNITS:	
AGPU	AC: 115/200v, 400 cycle, 3 phase, 30 kw gen DC: 28v, 700 amp AIR: 60 lb/min @ 40 psig @ sea level
AM32A–60*	AIR: 120 +/− 4 lb/min (1644 +/− 55 cfm) at 49 +/− 2 psia AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire, 120v, 1 phase, 25 kva DC: 28v, 500 amp, 15 kw
AM32A–60A	AIR: 150 +/− 5 lb/min (2055 +/− 68 cfm at 51 +/− psia AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire DC: 28v, 200 amp, 5.6 kw
AM32A–60B*	AIR: 130 lb/min, 50 psia AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire DC: 28v, 200 amp, 5.6 kw

*NOTE: During combined air and electrical loads, the pneumatic circuitry takes preference and will limit the amount of electrical power available.

USN JASU

ELECTRICAL STARTING UNITS:	
NC–8A/A1	DC: 500 amp constant, 750 amp intermittent, 28v; AC: 60 kva @ .8 pf, 115/200v, 3 phase, 400 Hz.
NC–10A/A1/B/C	DC: 750 amp constant, 1000 amp intermittent, 28v; AC: 90 kva, 115/200v, 3 phase, 400 Hz.
AIR STARTING UNITS:	
GTC–85/GTE–85	120 lbs/min @ 45 psi.
MSU–200NAV/A/U47A–5	204 lbs/min @ 56 psia.
WELLS AIR START SYSTEM	180 lbs/min @ 75 psi or 120 lbs/min @ 45 psi. Simultaneous multiple start capability.
COMBINED AIR AND ELECTRICAL STARTING UNITS:	
NCPP–105/RCPT	180 lbs/min @ 75 psi or 120 lbs/min @ 45 psi. 700 amp, 28v DC. 120/208v, 400 Hz AC, 30 kva.
JASU (ARMY)	
59B2–1B	28v, 7.5 kw, 280 amp.
OTHER JASU	
ELECTRICAL STARTING UNITS (DND):	
CE12	AC 115/200v, 140 kva, 400 Hz, 3 phase
CE13	AC 115/200v, 60 kva, 400 Hz, 3 phase
CE14	AC/DC 115/200v, 140 kva, 400 Hz, 3 phase, 28vDC, 1500 amp
CE15	DC 22–35v, 500 amp continuous 1100 amp intermittent
CE16	DC 22–35v, 500 amp continuous 1100 amp intermittent soft start
AIR STARTING UNITS (DND):	
CA2	ASA 45.5 psig, 116.4 lb/min
COMBINED AIR AND ELECTRICAL STARTING UNITS (DND)	
CEA1	AC 120/208v, 60 kva, 400 Hz, 3 phase DC 28v, 75 amp AIR 112.5 lb/min, 47 psig
ELECTRICAL STARTING UNITS (OTHER)	
C–26	28v 45kw 115–200v 15kw 380–800 Hz 1 phase 2 wire
C–26–B, C–26–C	28v 45kw: Split Bus: 115–200v 15kw 380–800 Hz 1 phase 2 wire
E3	DC 28v/10kw
AIR STARTING UNITS (OTHER):	
A4	40 psi/2 lb/sec (LPAS Mk12, Mk12L, Mk12A, Mk1, Mk2B)
MA–1	150 Air HP, 115 lb/min 50 psia
MA–2	250 Air HP, 150 lb/min 75 psia
CARTRIDGE:	
MXU–4A	USAF

(25) FUEL—MILITARY

Fuel available through US Military Base supply, DESC Into–Plane Contracts and/or reciprocal agreement is listed first and is followed by (Mil). At commercial airports where Into–Plane contracts are in place, the name of the refueling agent is shown. Military fuel should be used first if it is available. When military fuel cannot be obtained but Into–Plane contract fuel is available, Government aircraft must refuel with the contract fuel and applicable refueling agent to avoid any breach in contract terms and conditions. Fuel not available through the above is shown preceded by NC (no contract). When fuel is obtained from NC sources, local purchase procedures must be followed. The US Military Aircraft Identaplates DD Form 1896 (Jet Fuel), DD Form 1897 (Avgas) and AF Form 1245 (Avgas) are used at military installations only. The US Government Aviation Into–Plane Reimbursement (AIR) Card (currently issued by AVCARD) is the instrument to be used to obtain fuel under a DESC Into–Plane Contract and for NC purchases if the refueling agent at the commercial airport accepts the AVCARD. A current list of contract fuel locations is available online at www.desc.dla.mil/Static/ProductsAndServices.asp; click on the Commercial Airports button.

See legend item 14 for fuel code and description.

(26) SUPPORTING FLUIDS AND SYSTEMS—MILITARY

CODE	
ADI	Anti–Detonation Injection Fluid—Reciprocating Engine Aircraft.
W	Water Thrust Augmentation—Jet Aircraft.
WAI	Water–Alcohol Injection Type, Thrust Augmentation—Jet Aircraft.
SP	Single Point Refueling.
PRESAIR	Air Compressors rated 3,000 PSI or more.
De–Ice	Anti–icing/De–icing/Defrosting Fluid (MIL–A–8243).

OXYGEN:

LPOX	Low pressure oxygen servicing.
HPOX	High pressure oxygen servicing.
LHOX	Low and high pressure oxygen servicing.
LOX	Liquid oxygen servicing.
OXRB	Oxygen replacement bottles. (Maintained primarily at Naval stations for use in acft where oxygen can be replenished only by replacement of cylinders.)
OX	Indicates oxygen servicing when type of servicing is unknown.

NOTE: Combinations of above items is used to indicate complete oxygen servicing available;

LHOXRB	Low and high pressure oxygen servicing and replacement bottles;
LPOXRB	Low pressure oxygen replacement bottles only, etc.

NOTE: Aircraft will be serviced with oxygen procured under military specifications only. Aircraft will not be serviced with medical oxygen.

NITROGEN:

LPNIT — Low pressure nitrogen servicing.
HPNIT — High pressure nitrogen servicing.
LHNIT — Low and high pressure nitrogen servicing.

(27) OIL—MILITARY

US AVIATION OILS (MIL SPECS):

CODE	GRADE, TYPE
O–113	1065, Reciprocating Engine Oil (MIL–L–6082)
O–117	1100, Reciprocating Engine Oil (MIL–L–6082)
O–117+	1100, O–117 plus cyclohexanone (MIL–L–6082)
O–123	1065, (Dispersant), Reciprocating Engine Oil (MIL–L–22851 Type III)
O–128	1100, (Dispersant), Reciprocating Engine Oil (MIL–L–22851 Type II)
O–132	1005, Jet Engine Oil (MIL–L–6081)
O–133	1010, Jet Engine Oil (MIL–L–6081)
O–147	None, MIL–L–6085A Lubricating Oil, Instrument, Synthetic
O–148	None, MIL–L–7808 (Synthetic Base) Turbine Engine Oil
O–149	None, Aircraft Turbine Engine Synthetic, 7.5c St
O–155	None, MIL–L–6086C, Aircraft, Medium Grade
O–156	None, MIL–L–23699 (Synthetic Base), Turboprop and Turboshaft Engines
JOAP/SOAP	Joint Oil Analysis Program. JOAP support is furnished during normal duty hours, other times on request. (JOAP and SOAP programs provide essentially the same service, JOAP is now the standard joint service supported program.)

(28) TRANSIENT ALERT (TRAN ALERT)—MILITARY

Tran Alert service is considered to include all services required for normal aircraft turn–around, e.g., servicing (fuel, oil, oxygen, etc.), debriefing to determine requirements for maintenance, minor maintenance, inspection and parking assistance of transient aircraft. Drag chute repack, specialized maintenance, or extensive repairs will be provided within the capabilities and priorities of the base. Delays can be anticipated after normal duty hours/holidays/weekends regardless of the hours of transient maintenance operation. Pilots should not expect aircraft to be serviced for TURN–AROUNDS during time periods when servicing or maintenance manpower is not available. In the case of airports not operated exclusively by US military, the servicing indicated by the remarks will not always be available for US military

aircraft. When transient alert services are not shown, facilities are unknown. NO PRIORITY BASIS—means that transient alert services will be provided only after all the requirements for mission/tactical assigned aircraft have been accomplished.

㉙ AIRPORT REMARKS

The Attendance Schedule is the months, days and hours the airport is actually attended. Airport attendance does not mean watchman duties or telephone accessibility, but rather an attendant or operator on duty to provide at least minimum services (e.g., repairs, fuel, transportation).

Airport Remarks have been grouped in order of applicability. Airport remarks are limited to those items of information that are determined essential for operational use, i.e., conditions of a permanent or indefinite nature and conditions that will remain in effect for more than 30 days concerning aeronautical facilities, services, maintenance available, procedures or hazards, knowledge of which is essential for safe and efficient operation of aircraft. Information concerning permanent closing of a runway or taxiway will not be shown. A note ''See Special Notices'' shall be applied within this remarks section when a special notice applicable to the entry is contained in the Special Notices section of this publication.

Parachute Jumping indicates parachute jumping areas associated with the airport. See Parachute Jumping Area section of this publication for additional Information.

Landing Fee indicates landing charges for private or non-revenue producing aircraft. In addition, fees may be charged for planes that remain over a couple of hours and buy no services, or at major airline terminals for all aircraft.

Note: Unless otherwise stated, remarks including runway ends refer to the runway's approach end.

㉚ MILITARY REMARKS

Military Remarks published at a joint Civil/Military facility are remarks that are applicable to the Military. At Military Facilities all remarks will be published under the heading Military Remarks. Remarks contained in this section may not be applicable to civil users. The first group of remarks is applicable to the primary operator of the airport. Remarks applicable to a tenant on the airport are shown preceded by the tenant organization, i.e., (A) (AF) (N) (ANG), etc. Military airports operate 24 hours unless otherwise specified. Airport operating hours are listed first (airport operating hours will only be listed if they are different than the airport attended hours or if the attended hours are unavailable) followed by pertinent remarks in order of applicability. Remarks will include information on restrictions, hazards, traffic pattern, noise abatement, customs/agriculture/immigration, and miscellaneous information applicable to the Military.

Type of restrictions:

CLOSED: When designated closed, the airport is restricted from use by all aircraft unless stated otherwise. Any closure applying to specific type of aircraft or operation will be so stated. USN/USMC/USAF airports are considered closed during non–operating hours. Closed airports may be utilized during an emergency provided there is a safe landing area.

OFFICIAL BUSINESS ONLY: The airfield is closed to all transient military aircraft for obtaining routine services such as fueling, passenger drop off or pickup, practice approaches, parking, etc. The airfield may be used by aircrews and aircraft if official government business (including civilian) must be conducted on or near the airfield and prior permission is received from the airfield manager.

AF OFFICIAL BUSINESS ONLY OR NAVY OFFICIAL BUSINESS ONLY: Indicates that the restriction applies only to service indicated.

PRIOR PERMISSION REQUIRED (PPR): Airport is closed to transient aircraft unless approval for operation is obtained from the appropriate commander through Chief, Airfield Management or Airfield Operations Officer. Official Business or PPR does not preclude the use of US Military airports as an alternate for IFR flights. If a non–US military airport is used as a weather alternate and requires a PPR, the PPR must be requested and confirmed before the flight departs. The purpose of PPR is to control volume and flow of traffic rather than to prohibit it. Prior permission is required for all aircraft requiring transient alert service outside the published transient alert duty hours. All aircraft carrying hazardous materials must obtain prior permission as outlined in AFJI 11–204, AR 95–27, OPNAVINST 3710.7.

Note: OFFICIAL BUSINESS ONLY AND PPR restrictions are not applicable to Special Air Mission (SAM) or Special Air Resource (SPAR) aircraft providing person or persons on aboard are designated Code 6 or higher as explained in AFJMAN 11–213, AR 95–11, OPNAVINST 3722–8J. Official Business Only or PPR do not preclude the use of the airport as an alternate for IFR flights.

㉛ WEATHER DATA SOURCES

Weather data sources will be listed alphabetically followed by their assigned frequencies and/or telephone number and hours of operation.

ASOS—Automated Surface Observing System. Reports the same as an AWOS–3 plus precipitation identification and intensity, and freezing rain occurrence (future enhancement).

AWOS—Automated Weather Observing System

AWOS–A—reports altimeter setting (all other information is advisory only).

AWOS–1—reports altimeter setting, wind data and usually temperature, dewpoint and density altitude.

AWOS–2—reports the same as AWOS–1 plus visibility.

AWOS–3—reports the same as AWOS–1 plus visibility and cloud/ceiling data.

See AIM, Basic Flight Information and ATC Procedures for detailed description of AWOS.

HIWAS—See RADIO AIDS TO NAVIGATION
LAWRS—Limited Aviation Weather Reporting Station where observers report cloud height, weather, obstructions to vision, temperature and dewpoint (in most cases), surface wind, altimeter and pertinent remarks.
LLWAS—indicates a Low Level Wind Shear Alert System consisting of a center field and several field perimeter anemometers.
SAWRS—identifies airports that have a Supplemental Aviation Weather Reporting Station available to pilots for current weather information.
SWSL—Supplemental Weather Service Location providing current local weather information via radio and telephone.
TDWR—indicates airports that have Terminal Doppler Weather Radar.
WSP—indicates airports that have Weather System Processor.

When the automated weather source is broadcast over an associated airport NAVAID frequency (see NAVAID line), it shall be indicated by a bold ASOS, AWOS, or HIWAS followed by the frequency, identifier and phone number, if available.

(32) COMMUNICATIONS

Airport terminal control facilities and radio communications associated with the airport shall be shown. When the call sign is not the same as the airport name the call sign will be shown. Frequencies shall normally be shown in descending order with the primary frequency listed first. Frequencies will be listed, together with sectorization indicated by outbound radials, and hours of operation. Communications will be listed in sequence as follows:

Single Frequency Approach (SFA), Common Traffic Advisory Frequency (CTAF), Automatic Terminal Information Service (ATIS) and Aeronautical Advisory Stations (UNICOM) or (AUNICOM) along with their frequency is shown, where available, on the line following the heading ''COMMUNICATIONS.'' When the CTAF and UNICOM frequencies are the same, the frequency will be shown as CTAF/UNICOM 122.8.

The FSS telephone nationwide is toll free 1–800–WX–BRIEF (1–800–992–7433). When the FSS is located on the field it will be indicated as ''on arpt''. Frequencies available at the FSS will follow in descending order. Remote Communications Outlet (RCO) providing service to the airport followed by the frequency and FSS RADIO name will be shown when available.

FSS's provide information on airport conditions, radio aids and other facilities, and process flight plans. Airport Advisory Service (AAS) is provided on the CTAF by FSS's for select non-tower airports or airports where the tower is not in operation.

(See AIM, Para 4–1–9 Traffic Advisory Practices at Airports Without Operating Control Towers or AC 90–42C.)

Aviation weather briefing service is provided by FSS specialists. Flight and weather briefing services are also available by calling the telephone numbers listed.

Remote Communications Outlet (RCO)—An unmanned air/ground communications facility that is remotely controlled and provides UHF or VHF communications capability to extend the service range of an FSS.

Civil Communications Frequencies-Civil communications frequencies used in the FSS air/ground system are operated on 122.0, 122.2, 123.6; emergency 121.5; plus receive-only on 122.1.

a. 122.0 is assigned as the Enroute Flight Advisory Service frequency at selected FSS RADIO outlets.
b. 122.2 is assigned as a common enroute frequency.
c. 123.6 is assigned as the airport advisory frequency at select non-tower locations. At airports with a tower, FSS may provide airport advisories on the tower frequency when tower is closed.
d. 122.1 is the primary receive-only frequency at VOR's.
e. Some FSS's are assigned 50 kHz frequencies in the 122–126 MHz band (eg. 122.45). Pilots using the FSS A/G system should refer to this directory or appropriate charts to determine frequencies available at the FSS or remoted facility through which they wish to communicate.

Emergency frequency 121.5 and 243.0 are available at all Flight Service Stations, most Towers, Approach Control and RADAR facilities.

Frequencies published followed by the letter ''T'' or ''R'', indicate that the facility will only transmit or receive respectively on that frequency. All radio aids to navigation (NAVAID) frequencies are transmit only.

TERMINAL SERVICES

SFA—Single Frequency Approach.
CTAF—A program designed to get all vehicles and aircraft at airports without an operating control tower on a common frequency.
ATIS—A continuous broadcast of recorded non-control information in selected terminal areas.
D–ATIS—Digital ATIS provides ATIS information in text form outside the standard reception range of conventional ATIS via landline & data link communications and voice message within range of existing transmitters.
AUNICOM—Automated UNICOM is a computerized, command response system that provides automated weather, radio check capability and airport advisory information selected from an automated menu by microphone clicks.
UNICOM—A non-government air/ground radio communications facility which may provide airport information.
PTD—Pilot to Dispatcher.
APP CON—Approach Control. The symbol Ⓡ indicates radar approach control.
TOWER—Control tower.
GCA—Ground Control Approach System.
GND CON—Ground Control.
GCO—Ground Communication Outlet—An unstaffed, remotely controlled, ground/ground communications facility. Pilots at uncontrolled airports may contact ATC and FSS via VHF to a telephone connection to obtain an instrument clearance or close a VFR or IFR flight plan. They may also get an updated weather briefing prior to takeoff. Pilots will use four ''key clicks'' on the

VHF radio to contact the appropriate ATC facility or six ''key clicks'' to contact the FSS. The GCO system is intended to be used only on the ground.
DEP CON—Departure Control. The symbol Ⓡ indicates radar departure control.
CLNC DEL—Clearance Delivery.
PRE TAXI CLNC—Pre taxi clearance.

VFR ADVSY SVC—VFR Advisory Service. Service provided by Non-Radar Approach Control.
Advisory Service for VFR aircraft (upon a workload basis) ctc APP CON.
COMD POST—Command Post followed by the operator call sign in parenthesis.
PMSV—Pilot–to–Metro Service call sign, frequency and hours of operation, when full service is other than continuous. PMSV installations at which weather observation service is available shall be indicated, following the frequency and/or hours of operation as ''Wx obsn svc 1900–0000Z‡'' or ''other times'' may be used when no specific time is given. PMSV facilities manned by forecasters are considered ''Full Service''. PMSV facilities manned by weather observers are listed as ''Limited Service''.
OPS—Operations followed by the operator call sign in parenthesis.
CON
RANGE
FLT FLW—Flight Following
MEDIVAC
NOTE: Communication frequencies followed by the letter ''X'' indicate frequency available on request.

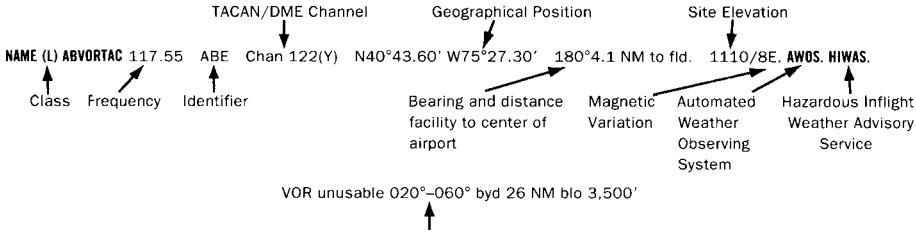
㉝ AIRSPACE

Information concerning Class B, C, and part–time D and E surface area airspace shall be published with effective times. Class D and E surface area airspace that is continuous as established by Rulemaking Docket will not be shown.
CLASS B—Radar Sequencing and Separation Service for all aircraft in CLASS B airspace.
CLASS C—Separation between IFR and VFR aircraft and sequencing of VFR arrivals to the primary airport.
TRSA—Radar Sequencing and Separation Service for participating VFR Aircraft within a Terminal Radar Service Area.
Class C, D, and E airspace described in this publication is that airspace usually consisting of a 5 NM radius core surface area that begins at the surface and extends upward to an altitude above the airport elevation (charted in MSL for Class C and Class D). Class E surface airspace normally extends from the surface up to but not including the overlying controlled airspace.
When part–time Class C or Class D airspace defaults to Class E, the core surface area becomes Class E. This will be formatted as:
AIRSPACE: CLASS C svc ''times'' ctc **APP CON** other times CLASS E:
or
AIRSPACE: CLASS D svc ''times'' other times CLASS E.
When a part–time Class C, Class D or Class E surface area defaults to Class G, the core surface area becomes Class G up to, but not including, the overlying controlled airspace. Normally, the overlying controlled airspace is Class E airspace beginning at either 700′ or 1200′ AGL. This will be formatted as:
AIRSPACE: CLASS C svc ''times'' ctc **APP CON** other times CLASS G, with CLASS E 700′ (or 1200′) AGL & abv:
or
AIRSPACE: CLASS D svc ''times'' other times CLASS G with CLASS E 700′ (or 1200′) AGL & abv:
or
AIRSPACE: CLASS E svc ''times'' other times CLASS G with CLASS E 700′ (or 1200′) AGL & abv.
NOTE: AIRSPACE SVC "TIMES" INCLUDE ALL ASSOCIATED ARRIVAL EXTENSIONS. Surface area arrival extensions for instrument approach procedures become part of the primary core surface area. These extensions may be either Class D or Class E airspace and are effective concurrent with the times of the primary core surface area. For example, when a part–time Class C, Class D or Class E surface area defaults to Class G, the associated arrival extensions will default to Class G at the same time. When a part–time Class C or Class D surface area defaults to Class E, the arrival extensions will remain in effect as Class E airspace.
NOTE: CLASS E AIRSPACE EXTENDING UPWARD FROM 700 FEET OR MORE ABOVE THE SURFACE, DESIGNATED IN CONJUNCTION WITH AN AIRPORT WITH AN APPROVED INSTRUMENT PROCEDURE.
Class E 700′ AGL (shown as magenta vignette on sectional charts) and 1200′ AGL (blue vignette) areas are designated when necessary to provide controlled airspace for transitioning to/from the terminal and enroute environments. Unless otherwise specified, these 700′/1200′ AGL Class E airspace areas remain in effect continuously, regardless of airport operating hours or surface area status. These transition areas should not be confused with surface areas or arrival extensions.
(See Chapter 3, AIRSPACE, in the Aeronautical Information Manual for further details)

㉞ RADIO AIDS TO NAVIGATION

The Airport/Facility Directory lists, by facility name, all Radio Aids to Navigation that appear on National Aeronautical Navigation Services Visual or IFR Aeronautical Charts and those upon which the FAA has approved an Instrument Approach Procedure, with exception of selected TACANs. Military TACAN information will be published for Military facilities contained in this publication. All VOR, VORTAC, TACAN, ILS and MLS equipment in the National Airspace System has an automatic monitoring and shutdown feature in the event of malfunction. Unmonitored, as used in this publication, for any navigational aid, means that monitoring personnel cannot observe the malfunction or shutdown signal. The NAVAID NOTAM file identifier will be shown as ''NOTAM FILE IAD'' and will be listed on the Radio Aids to Navigation line. When two or more NAVAIDS are listed and the NOTAM file identifier is different from that shown on the Radio Aids to Navigation line, it will be shown with the NAVAID listing. NOTAM file identifiers for ILSs and its components (e.g., NDB (LOM) are the same as the associated airports and are not repeated. Automated Surface Observing System (ASOS), Automated Weather Observing System (AWOS), and Hazardous Inflight Weather Advisory Service (HIWAS) will be shown when this service is broadcast over selected NAVAIDs.

NAVAID information is tabulated as indicated in the following sample:



Restriction within the normal altitude/range of the navigational aid (See primary alphabetical listing for restrictions on VORTAC and VOR/DME).

Note: Those DME channel numbers with a (Y) suffix require TACAN to be placed in the ''Y'' mode to receive distance information.

HIWAS—Hazardous Inflight Weather Advisory Service is a continuous broadcast of inflight weather advisories including summarized SIGMETs, convective SIGMETs, AIRMETs and urgent PIREPs. HIWAS is presently broadcast over selected VOR's throughout the U.S.

ASR/PAR—Indicates that Surveillance (ASR) or Precision (PAR) radar instrument approach minimums are published in the U.S. Terminal Procedures. Only part-time hours of operation will be shown.

RADIO CLASS DESIGNATIONS

VOR/DME/TACAN Standard Service Volume (SSV) Classifications

SSV Class	Altitudes	Distance (NM)
(T) Terminal	1000′ to 12,000′	25
(L) Low Altitude	1000′ to 18,000′	40
(H) High Altitude	1000′ to 14,500′	40
	14,500′ to 18,000′	100
	18,000′ to 45,000′	130
	45,000′ to 60,000′	100

NOTE: Additionally, (H) facilities provide (L) and (T) service volume and (L) facilities provide (T) service. Altitudes are with respect to the station's site elevation. Coverage is not available in a cone of airspace directly above the facility.

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The term VOR is, operationally, a general term covering the VHF omnidirectional bearing type of facility without regard to the fact that the power, the frequency protected service volume, the equipment configuration, and operational requirements may vary between facilities at different locations.

AB	Automatic Weather Broadcast.
DF	Direction Finding Service.
DME	UHF standard (TACAN compatible) distance measuring equipment.
DME(Y)	UHF standard (TACAN compatible) distance measuring equipment that require TACAN to be placed in the ''Y'' mode to receive DME.
GS	Glide slope.
H	Non-directional radio beacon (homing), power 50 watts to less than 2,000 watts (50 NM at all altitudes).
HH	Non-directional radio beacon (homing), power 2,000 watts or more (75 NM at all altitudes).
H-SAB	Non-directional radio beacons providing automatic transcribed weather service.
ILS	Instrument Landing System (voice, where available, on localizer channel).
IM	Inner marker.
ISMLS	Interim Standard Microwave Landing System.
LDA	Localizer Directional Aid.
LMM	Compass locator station when installed at middle marker site (15 NM at all altitudes).
LOM	Compass locator station when installed at outer marker site (15 NM at all altitudes).
MH	Non-directional radio beacon (homing) power less than 50 watts (25 NM at all altitudes).
MLS	Microwave Landing System.
MM	Middle marker.
OM	Outer marker.
S	Simultaneous range homing signal and/or voice.
SABH	Non-directional radio beacon not authorized for IFR or ATC. Provides automatic weather broadcasts.
SDF	Simplified Direction Facility.
TACAN	UHF navigational facility-omnidirectional course and distance information.
VOR	VHF navigational facility-omnidirectional course only.
VOR/DME	Collocated VOR navigational facility and UHF standard distance measuring equipment.
VORTAC	Collocated VOR and TACAN navigational facilities.
W	Without voice on radio facility frequency.
Z	VHF station location marker at a LF radio facility.

ILS FACILITY PEFORMANCE CLASSIFICATION CODES

Codes define the ability of an ILS to support autoland operations. The two portions of the code represent Official Category and farthest point along a Category I, II, or III approach that the Localizer meets Category III structure tolerances.

Official Category: I, II, or III; the lowest minima on published or unpublished procedures supported by the ILS.

Farthest point of satisfactory Category III Localizer performance for Category I, II, or III approaches: A – 4 NM prior to runway threshold, B – 3500 ft prior to runway threshold, C – glide angle dependent but generally 750–1000 ft prior to threshold, T – runway threshold, D – 3000 ft after runway threshold, and E – 2000 ft prior to stop end of runway.

ILS information is tabulated as indicated in the following sample:

ILS/DME 108.5 I–ORL Chan 22 Rwy 18. Class IIE. LOM HERNY NDB.

ILS Facility Performance Classification Code

FREQUENCY PAIRING PLAN AND MLS CHANNELING

MLS CHANNEL	VHF FREQUENCY	TACAN CHANNEL	MLS CHANNEL	VHF FREQUENCY	TACAN CHANNEL	MLS CHANNEL	VHF FREQUENCY	TACAN CHANNEL
500	108.10	18X	568	109.45	31Y	636	114.15	88Y
502	108.30	20X	570	109.55	32Y	638	114.25	89Y
504	108.50	22X	572	109.65	33Y	640	114.35	90Y
506	108.70	24X	574	109.75	34Y	642	114.45	91Y
508	108.90	26X	576	109.85	35Y	644	114.55	92Y
510	109.10	28X	578	109.95	36Y	646	114.65	93Y
512	109.30	30X	580	110.05	37Y	648	114.75	94Y
514	109.50	32X	582	110.15	38Y	650	114.85	95Y
516	109.70	34X	584	110.25	39Y	652	114.95	96Y
518	109.90	36X	586	110.35	40Y	654	115.05	97Y
520	110.10	38X	588	110.45	41Y	656	115.15	98Y
522	110.30	40X	590	110.55	42Y	658	115.25	99Y
524	110.50	42X	592	110.65	43Y	660	115.35	100Y
526	110.70	44X	594	110.75	44Y	662	115.45	101Y
528	110.90	46X	596	110.85	45Y	664	115.55	102Y
530	111.10	48X	598	110.95	46Y	666	115.65	103Y
532	111.30	50X	600	111.05	47Y	668	115.75	104Y
534	111.50	52X	602	111.15	48Y	670	115.85	105Y
536	111.70	54X	604	111.25	49Y	672	115.95	106Y
538	111.90	56X	606	111.35	50Y	674	116.05	107Y
540	108.05	17Y	608	111.45	51Y	676	116.15	108Y
542	108.15	18Y	610	111.55	52Y	678	116.25	109Y
544	108.25	19Y	612	111.65	53Y	680	116.35	110Y
546	108.35	20Y	614	111.75	54Y	682	116.45	111Y
548	108.45	21Y	616	111.85	55Y	684	116.55	112Y
550	108.55	22Y	618	111.95	56Y	686	116.65	113Y
552	108.65	23Y	620	113.35	80Y	688	116.75	114Y
554	108.75	24Y	622	113.45	81Y	690	116.85	115Y
556	108.85	25Y	624	113.55	82Y	692	116.95	116Y
558	108.95	26Y	626	113.65	83Y	694	117.05	117Y
560	109.05	27Y	628	113.75	84Y	696	117.15	118Y
562	109.15	28Y	630	113.85	85Y	698	117.25	119Y
564	109.25	29Y	632	113.95	86Y			
566	109.35	30Y	634	114.05	87Y			

FREQUENCY PAIRING PLAN AND MLS CHANNELING

The following is a list of paired VOR/ILS VHF frequencies with TACAN channels and MLS channels.

TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL
2X	134.5	-	19Y	108.25	544	25X	108.80	-
2Y	134.55	-	20X	108.30	502	25Y	108.85	556
11X	135.4	-	20Y	108.35	546	26X	108.90	508
11Y	135.45	-	21X	108.40	-	26Y	108.95	558
12X	135.5	-	21Y	108.45	548	27X	109.00	-
12Y	135.55	-	22X	108.50	504	27Y	109.05	560
17X	108.00	-	22Y	108.55	550	28X	109.10	510
17Y	108.05	540	23X	108.60	-	28Y	109.15	562
18X	108.10	500	23Y	108.65	552	29X	109.20	-
18Y	108.15	542	24X	108.70	506	29Y	109.25	564
19X	108.20	-	24Y	108.75	554	30X	109.30	512

TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL	TACAN CHANNEL	VHF FREQUENCY	MLS CHANNEL
30Y	109.35	566	63X	133.60	-	95Y	114.85	650
31X	109.40	-	63Y	133.65	-	96X	114.90	-
31Y	109.45	568	64X	133.70	-	96Y	114.95	652
32X	109.50	514	64Y	133.75	-	97X	115.00	-
32Y	109.55	570	65X	133.80	-	97Y	115.05	654
33X	109.60	-	65Y	133.85	-	98X	115.10	-
33Y	109.65	572	66X	133.90	-	98Y	115.15	656
34X	109.70	516	66Y	133.95	-	99X	115.20	-
34Y	109.75	574	67X	134.00	-	99Y	115.25	658
35X	109.80	-	67Y	134.05	-	100X	115.30	-
35Y	109.85	576	68X	134.10	-	100Y	115.35	660
36X	109.90	518	68Y	134.15	-	101X	115.40	-
36Y	109.95	578	69X	134.20	-	101Y	115.45	662
37X	110.00	-	69Y	134.25	-	102X	115.50	-
37Y	110.05	580	70X	112.30	-	102Y	115.55	664
38X	110.10	520	70Y	112.35	-	103X	115.60	-
38Y	110.15	582	71X	112.40	-	103Y	115.65	666
39X	110.20	-	71Y	112.45	-	104X	115.70	-
39Y	110.25	584	72X	112.50	-	104Y	115.75	668
40X	110.30	522	72Y	112.55	-	105X	115.80	-
40Y	110.35	586	73X	112.60	-	105Y	115.85	670
41X	110.40	-	73Y	112.65	-	106X	115.90	-
41Y	110.45	588	74X	112.70	-	106Y	115.95	672
42X	110.50	524	74Y	112.75	-	107X	116.00	-
42Y	110.55	590	75X	112.80	-	107Y	116.05	674
43X	110.60	-	75Y	112.85	-	108X	116.10	-
43Y	110.65	592	76X	112.90	-	108Y	116.15	676
44X	110.70	526	76Y	112.95	-	109X	116.20	-
44Y	110.75	594	77X	113.00	-	109Y	116.25	678
45X	110.80	-	77Y	113.05	-	110X	116.30	-
45Y	110.85	596	78X	113.10	-	110Y	116.35	680
46X	110.90	528	78Y	113.15	-	111X	116.40	-
46Y	110.95	598	79X	113.20	-	111Y	116.45	682
47X	111.00	-	79Y	113.25	-	112X	116.50	-
47Y	111.05	600	80X	113.30	-	112Y	116.55	684
48X	111.10	530	80Y	113.35	620	113X	116.60	-
48Y	111.15	602	81X	113.40	-	113Y	116.65	686
49X	111.20	-	81Y	113.45	622	114X	116.70	-
49Y	111.25	604	82X	113.50	-	114Y	116.75	688
50X	111.30	532	82Y	113.55	624	115X	116.80	-
50Y	111.35	606	83X	113.60	-	115Y	116.85	690
51X	111.40	-	83Y	113.65	626	116X	116.90	-
51Y	111.45	608	84X	113.70	-	116Y	116.95	692
52X	111.50	534	84Y	113.75	628	117X	117.00	-
52Y	111.55	610	85X	113.80	-	117Y	117.05	694
53X	111.60	-	85Y	113.85	630	118X	117.10	-
53Y	111.65	612	86X	113.90	-	118Y	117.15	696
54X	111.70	536	86Y	113.95	632	119X	117.20	-
54Y	111.75	614	87X	114.00	-	119Y	117.25	698
55X	111.80	-	87Y	114.05	634	120X	117.30	-
55Y	111.85	616	88X	114.10	-	120Y	117.35	-
56X	111.90	538	88Y	114.15	636	121X	117.40	-
56Y	111.95	618	89X	114.20	-	121Y	117.45	-
57X	112.00	-	89Y	114.25	638	122X	117.50	-
57Y	112.05	-	90X	114.30	-	122Y	117.55	-
58X	112.10	-	90Y	114.35	640	123X	117.60	-
58Y	112.15	-	91X	114.40	-	123Y	117.65	-
59X	112.20	-	91Y	114.45	642	124X	117.70	-
59Y	112.25	-	92X	114.50	-	124Y	117.75	-
60X	133.30	-	92Y	114.55	644	125X	117.80	-
60Y	133.35	-	93X	114.60	-	125Y	117.85	-
61X	133.40	-	93Y	114.65	646	126X	117.90	-
61Y	133.45	-	94X	114.70	-	126Y	117.95	-
62X	133.50	-	94Y	114.75	648			
62Y	133.55	-	95X	114.80	-			

(35) COMM/NAV/WEATHER REMARKS:

These remarks consist of pertinent information affecting the current status of communications, NAVAIDs and weather.

ALAMO LANDING FLD (L92) 2 W UTC−8(−7DT) N37°21.75′ W115°11.67′ **LAS VEGAS**

3719 NOTAM FILE RNO

RWY 14–32: 5000X120 (DIRT)

RWY 14: Brush. **RWY 32:** Berm.

RWY 15–33: 2500X70 (DIRT)

RWY 15: Berm. **RWY 33:** Berm.

AIRPORT REMARKS: Unattended. Uncontrolled vehicle access. No line of sight between rwy ends. Rwys 15–33 and Rwy 14–32 livestock in vicinity of rwys.

COMMUNICATIONS: CTAF 122.9

AUSTIN (TMT) 4 SW UTC−8(−7DT) N39°28.08′ W117°11.72′ **LAS VEGAS**

5730 B NOTAM FILE RNO **H–3C, L–9B**

RWY 18–36: H6000X75 (ASPH) S–30 MIRL

RWY 18: REIL. PAPI(P2L)—GA 3.0° TCH 40′. **RWY 36:** REIL. PAPI(P2L)—GA 3.0° TCH 40′. Fence.

AIRPORT REMARKS: Unattended. Military acft opr in vicinity of arpt. ACTIVATE MIRL Rwy 18–36, PAPI Rwys 18 and 36, REIL Rwy 18 and 36—CTAF.

WEATHER DATA SOURCES: AWOS–3 132.95 (775) 964–1144. Plus precipitation and thunderstorm.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.

MINA (H) VORTAC 115.1 MVA Chan 98 N38°33.92′ W118°01.97′ 019° 66.8 NM to fld. 7860/17E.

HIWAS.

BATTLE MOUNTAIN (BAM) 3 SE UTC−8(−7DT) N40°35.94′ W116°52.46′ **SALT LAKE CITY**

4532 B S4 **FUEL** 100LL, JET A NOTAM FILE RNO **H–3C, L–9B, 11B**

RWY 12–30: H7300X100 (ASPH) S–30, D–104, ST–159 MIRL **IAP**

RWY 03–21: H7299X150 (ASPH) S–30, D–125, ST–132 MIRL

RWY 03: VASI(V2R)—GA 3.0° TCH 26′.

RWY 21: PAPI(P4L)—GA 3.0° TCH 45′.

AIRPORT REMARKS: Attended Oct–May 1500–0100Z‡, Jun–Sep 1500–0200Z‡. After hrs call 775–635–2245. ACTIVATE MIRL Rwy 03–21 and Rwy 12–30, and perimeter lgts H1—CTAF.

WEATHER DATA SOURCES: AWOS–3 119.45 (775) 635–8419.

COMMUNICATIONS: CTAF/UNICOM 122.8

MT LEWIS RCO 122.65 (RENO RADIO)

SALT LAKE CENTER APP/DEP CON 132.25

RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.

(H) VORTACW 112.2 BAM Chan 59 N40°34.15′ W116°55.34′ 033° 2.8 NM to fld. 4536/18E.

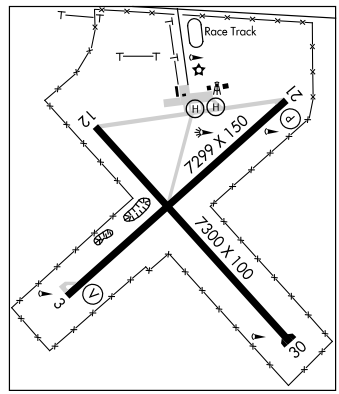
VORTAC unusable:

050°–060° byd 30 NM blo 12,000′

115°–165° byd 15 NM blo 12,000′

255°–290° byd 15 NM blo 12,000′

DME unusable 246°–255° byd 34 NM blo 14,000′



HELIPAD H1: H60X60 (CONC)

HELIPAD H2: H60X60 (CONC)

HELIPORT REMARKS: Rwy H1 perimeter lights. ACTIVATE MIRL Rwy 03–21 and Rwy 12–30, and perimeter lgts H1—CTAF.

BEATTY (BTY) 3 SW UTC−8(−7DT) N36°51.66′ W116°47.22′ **LAS VEGAS**
3170 B NOTAM FILE RNO **H–4H, L–9B**

RWY 16–34: H5600X60 (ASPH) S–15, D–30 MIRL

AIRPORT REMARKS: Unattended. Low flying military aircraft in vicinity of arpt. Terrain rises at constant rate of approximately 35–1 for 2 miles to base of mountain. ACTIVATE MIRL Rwy 16–34—CTAF.

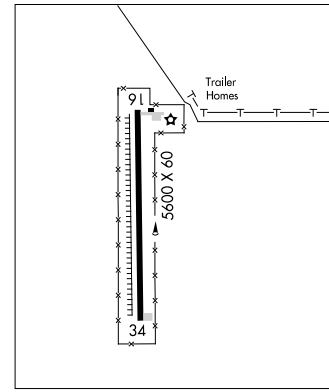
WEATHER DATA SOURCES: HIWAS 114.7 BTY.

COMMUNICATIONS: CTAF 122.9

RCO 122.1R 114.7T (RENO RADIO)

RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.

(H) VORTAC 114.7 BTY Chan 94 N36°48.04′ W116°44.86′ 313° 4.5 NM to fld. 2925/16E. **HIWAS.**
VORTAC unusable:
325°–089° beyond 9 NM
195°–210° beyond 33 NM below 10,500′
265°–305° beyond 30 NM below 10,200′
305°–325° beyond 28 NM below 9000′
360°–060° byd 12 NM



BOULDER CITY N35°59.75′ W114°51.82′ NOTAM FILE RNO. **LAS VEGAS**
(H) VORTACW 116.7 BLD Chan 114 163° 2.9 NM to Boulder City Muni. 3650/15E. **HIWAS.** **H–4I, L–7E**

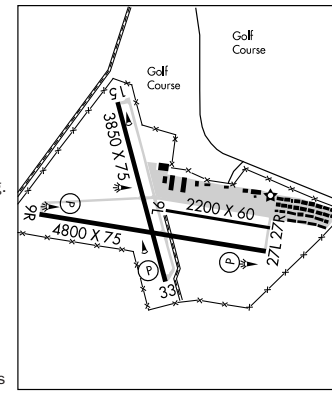
BOULDER CITY MUNI (BVU) 1SW UTC−8(−7DT) N35°56.85′ W114°51.67′ **LAS VEGAS**
2201 B S4 **FUEL** 100LL, JET A NOTAM FILE RNO **L–7E**

RWY 09R–27L: H4800X75 (ASPH) S–12.5 MIRL
RWY 09R: REIL. PAPI(P2L)—GA 3.0° TCH 40′. Rgt tfc.
RWY 27L: REIL. PAPI(P2L)—GA 3.0° TCH 40′. P–line.

RWY 15–33: H3850X75 (ASPH) S–12.5 MIRL
RWY 15: REIL. Rgt tfc.
RWY 33: REIL. PAPI(P2L)—GA 3.0° TCH 40′.

RWY 09L–27R: H2200X60 (ASPH) S–12.5
RWY 27R: Rgt tfc.

AIRPORT REMARKS: Attended 1600–0100Z‡. Self service fuel avbl continuously. For acft svc ctc 122.8 or 123.5. Parachute Jumping. Skydive drop zone adjacent arpt north side. Ultralight activity 2 miles southwest of arpt invof dry lake bed. Rwy 09L–27R rwy in poor condition due to multiple 2″ wide cracks. Sage brush and uneven terrian in the rwy safety areas. Soft shoulders adjacent to all rwys and twys. Dep Rwy 33 not recommended. Rwy 33 steep rwy gradient, rising terrain, obstacles off dep end. Rwy 27L preferred lgt wind conditions. Helicopters cross active rwys and twys. Large number of Grand Cnayon tour acft ops in vicinity. Power lines all quadrants. 1′–5′ drainage ditch around all runways and taxiways. 10′ drainage channel 50′ from thld crossing centerline Rwy 09L. Steep rising terrain north of arpt. Avoid overflight of Boulder City residential areas. ACTIVATE MIRL Rwy 09R–27L and Rwy 15–33—CTAF.



WEATHER DATA SOURCES: AWOS–3 118.475 (702) 293–1532. **HIWAS** 116.7 BLD.

COMMUNICATIONS: CTAF/UNICOM 122.7

RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.

(H) VORTACW 116.7 BLD Chan 114 N35°59.75′ W114°51.82′ 163° 2.9 NM to fld. 3650/15E. **HIWAS.**

BULLION N40°45.58′ W115°45.68′ NOTAM FILE EKO. **SALT LAKE CITY**
(L) VORW/DME 114.5 BQU Chan 92 324° 4.2 NM to Elko Rgnl. 6464/17E. **L–9B, 11B**
VOR unusable 088°–110° byd 20 NM blo 12,900′ 110°–130° byd 32 NM blo 12,900′.
DME unusable 088°–110° byd 20 NM 110°–130° byd 32 NM

CAL NEV ARI

KIDWELL (1L4) 0 S UTC−8(−7DT) N35°18.33′ W114°52.97′ **PHOENIX**

2605 NOTAM FILE RNO

RWY 15–33: 4140X65 (DIRT) LIRL (NSTD)

RWY 15: Fence. **RWY 33:** Road.

AIRPORT REMARKS: Attended continuously. Ultralight activity on and invof arpt. Arpt is residential airpark. Be alert to automobile tfc on Rwy 15–33. +70′ twr 350° left of centerline Rwy 15 and adjacent to the thld. Rwy 15–33 center 4075′ lgtd. Rwy 15–33 NSTD LIRL thld lgts 6 green lgts.

COMMUNICATIONS: CTAF 122.9

CARSON CITY

CARSON (CXP) 3 NE UTC−8(−7DT) N39°11.54′ W119°43.96′ **SAN FRANCISCO**

4705 B S4 **FUEL** 100, 100LL, JET A OX 1, 3 TPA—5505(800) NOTAM FILE CXP **L–9A**

RWY 09–27: H6100X75 (ASPH) S–30 MIRL

RWY 09: PVASI(NSTD)—GA 4.0° TCH 35′. Road. Rgt tfc. **RWY 27:** VASI(V2L)—GA 3.0° TCH 26′.

AIRPORT REMARKS: Attended Jun–Sep 1500–0400Z‡, Oct–May 1600–0300Z‡. Fuel self–service 24 hrs. Ultralight activity on and invof arpt. Rwy 09 non–standard PSIL single box left side. Fee for tiedown only.

WEATHER DATA SOURCES: AWOS–3 119.925 (775) 884–4708.

COMMUNICATIONS: CTAF/UNICOM 123.0

Ⓡ **RENO APP/DEP CON** 119.2

RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.

MUSTANG (H) VORTACW 117.9 FMG Chan 126 N39°31.88′ W119°39.37′ 174° 20.6 NM to fld. 5949/16E.

PARKER CARSON (2Q5) 5 E UTC−8(−7DT) N39°12.10′ W119°41.01′ **SAN FRANCISCO**

4939 NOTAM FILE RNO

RWY 06–24: 1700X40 (GRVL)

RWY 06: Road. **RWY 24:** Hill.

AIRPORT REMARKS: Unattended. Power lines north, south and west of arpt. Rwy 24 ground rises immediately to 15%. +2′ sage brush on rwy edges full length.

COMMUNICATIONS: CTAF 122.9

COALDALE N38°00.20′ W117°46.23′ NOTAM FILE RNO. **LAS VEGAS**

(H) VORTAC 117.7 OAL Chan 124 67° 32.6 NM to Tonopah. 4800/17E. **H–3B, L–9A**

VOR unusable 060°–075° beyond 15 NM below 16,000′.

DME unusable 060°–075° beyond 15 NM below 16,000′.

VORTAC unusable:

150°–180° beyond 15 NM below 15,500′ 305°–015° beyond 25 NM below 15,500′

RCO 122.1R 117.7T (RENO RADIO)

CREECH AFB (INS) N36°35.23′ W115°40.40′ NOTAM FILE RNO. **LAS VEGAS**

AIRSPACE: CLASS D svc Mon–Fri 1300–0530Z‡, clsd weekends and holidays, Opr hr vary based on Nellis AFB Wing rgr. ASOS 121.125 DSN 384–0667, C702–404–0667. **L–9B**

CRESCENT VALLEY (U74) 1 E UTC−8(−7DT) N40°24.96′ W116°33.81′ **SALT LAKE CITY**

4787 NOTAM FILE RNO

RWY 05–23: 5424X60 (DIRT)

RWY 05: Road. **RWY 23:** Road.

RWY 14–32: 4650X75 (DIRT)

RWY 14: Tree.

AIRPORT REMARKS: Unattended. Cattle on and invof rwys. Rwy 05–23 first 1600′ of Rwy 23 rough surface. Uncontrolled vehicle access all runways. Rwy 14–32 +2′ earth ridges along rwy edges and 3′ berm along both sides of rwy. Rwy 05–23 −1′ drainage ditch both sides rwy, +2′ earth ridges along rwy edges.

COMMUNICATIONS: CTAF 122.9

CURRANT N38°40.25′ W115°36.07′ **LAS VEGAS**

RCO 122.3 (RENO RADIO) **L–9B**

CURRANT RANCH (9U7) 1 SW UTC−8(−7DT) N38°44.16′ W115°28.82′ **LAS VEGAS**

5181 NOTAM FILE RNO

RWY 03–21: 5100X80 (TURF–DIRT)

RWY 21: Road.

AIRPORT REMARKS: Unattended. Rwy 03–21 has unlimited vehicle access to acft movement area. Wind permitting land Rwy 03 tkf Rwy 21 to avoid overflying town. Space for tiedown, but no ropes or chains.

COMMUNICATIONS: CTAF 122.9

DAYTON/CARSON CITY

DAYTON VALLEY AIRPARK (A34) 2 E UTC−8(−7DT) N39°14.31′ W119°33.33′ **SAN FRANCISCO**
4414 NOTAM FILE RNO Not insp. **H–3B, L–9A**
RWY 05–23: H5343X75 (ASPH) S–30, D–70
RWY 05: Thld dsplcd 991′. Tower. Rgt tfc.
AIRPORT REMARKS: Unattended. For field information call 775–246–7620. Noise abatement: small acft ¾ NM S at 5414′ MSL–1000′ AGL; Jets and large acft 1¾ NM S at 6414′ MSL–2000′ AGL; extend tkfs beyond schools and residential areas.
COMMUNICATIONS: CTAF 122.9
RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.
MUSTANG (H) VORTACW 117.9 FMG Chan 126 N39°31.88′ W119°39.37′ 149° 18.2 NM to fld. 5949/16E.

DENIO JUNCTION (E85) 3 SE UTC−8(−7DT) N41°57.24′ W118°37.86′ **KLAMATH FALLS**
4202 **FUEL** MOGAS NOTAM FILE RNO
RWY 02–20: 3320X42 (DIRT)
RWY 02: Hill. **RWY 20:** Road.
RWY 13–31: 3430X90 (DIRT)
RWY 31: Trees.
RWY 07–25: 3100X100 (DIRT)
RWY 25: P–line.
AIRPORT REMARKS: Unattended. MOGAS avbl dalgt hrs at adjacent cafe 775–941–0371. Rwy 25 and Rwy 31 thlds marked with white tires. Rwys may be soft during winter months.
COMMUNICATIONS: CTAF 122.9

DERBY FLD (See LOVELOCK)

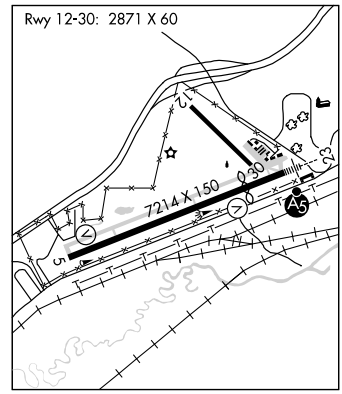
DUCKWATER (Ø1U) 6 SE UTC−8(−7DT) N38°51.10′ W115°38.02′ **LAS VEGAS**
5124 NOTAM FILE RNO
RWY 15–33: 3400X80 (DIRT)
RWY 33: Road.
RWY 03–21: 2700X75 (DIRT)
RWY 03: Road. **RWY 21:** Road.
AIRPORT REMARKS: Unattended. Arpt CLOSED indef. Rwy 03–21 and Rwy 15–33 overgrown unsuitable for acft use. Watch, for livestock on rwys. Rwy 03–21 and Rwy 15–33 uncontrolled vehicle access. Rwy 03–21 + 1′ berm full length north side, − 2′ ditch full length south side. Rwy 15–33 + 1′ berm both sides of rwy. Rwy 03, 2 stakes N edge of rwy, 135′ from rwy end, + 4′ high. Rwy 33 P–line 1500′ from rwy end + 35 ′ both sides of centerline, marked with orange ball, 42:1 slope.
COMMUNICATIONS: CTAF 122.9

DYER (2Q9) 6 SE UTC−8(−7DT) N37°36.58′ W118°00.39′ **SAN FRANCISCO**
4899 S4 NOTAM FILE RNO
RWY 12–30: 2870X50 (DIRT)
RWY 12: Pole. **RWY 30:** Trees.
AIRPORT REMARKS: Unattended. Emerg fuel only call 775–572–3059. Rwy 12 p–line marked with orange balls. Rwy 12–30 +1′ berms both sides of rwy. Rwy 12–30 thld marked by white tires. NW end Rwy 12–30 width varies due to weeds. Apch Rwy 12 has weeds to 5 inches.
COMMUNICATIONS: CTAF 122.9

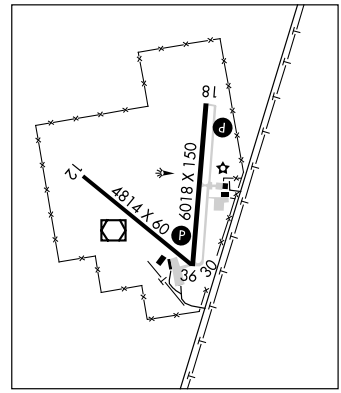
ECHO BAY (See OVERTON)

ELKO RGNL (EKO) 1 W UTC−8(−7DT) N40°49.50′ W115°47.50′ **SALT LAKE CITY**
5140 B S4 **FUEL** 100, JET A TPA—See Remarks. Class II, ARFF Index A **H–3C, L–9B, 11B**
NOTAM FILE EKO **IAP, AD**

RWY 05–23: H7214X150 (ASPH–GRVD) S–78, D–105, ST–133, DT–170 MIRL 0.3% up NE **RWY 05:** VASI(V4L)—GA 3.0° TCH 43′. Road. Rgt tfc.
RWY 23: MALSR. VASI(V4L)—GA 3.25° TCH 34′. Thld dsplcd 795′. Lgtd pole.
RWY 12–30: H2871X60 (ASPH) S–12 2.0% up NW
RWY 12: Pole. Rgt tfc. **RWY 30:** Pole.
RUNWAY DECLARED DISTANCE INFORMATION
RWY 05: TORA–7214 TODA–7214 ASDA–7214 LDA–7214
RWY 23: TORA–7211 TODA–8211 ASDA–7211 LDA–6410
AIRPORT REMARKS: Attended 1300–0300Z‡. PPR for all acft operations over 100,000 pounds call 775–777–7190. Rwy 23 7211′ for dep; 6401′ for ldg; Rwy 05 7211′ for dep and ldg. TPA—6140(1000), jet acft 6640(1500). ACTIVATE MIRL Rwy 05–23, MALSR Rwy 23—122.7. VASI Rwy 05 and Rwy 23 opr continuously.
WEATHER DATA SOURCES: ASOS 119.275 (775) 778–9639.
COMMUNICATIONS: CTAF/UNICOM 123.0
RCO 122.6 (RENO RADIO)
SALT LAKE CENTER APP/DEP CON 132.25
RADIO AIDS TO NAVIGATION: NOTAM FILE EKO.
BULLION (L) VORW/DME 114.5 BQU Chan 92 N40°45.58′ W115°45.68′ 324° 4.2 NM to fld. 6464/17E.
LDA/DME 108.5 I–EKO Chan 22 Rwy 23. DME unusable byd 13 NM blo 9,000′.

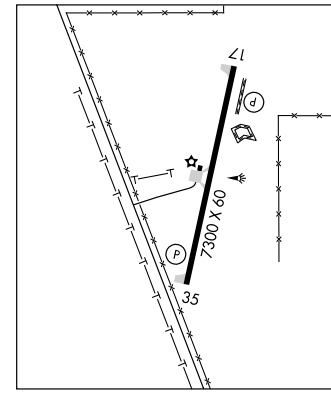


ELY ARPT (YELLAND FLD) (ELY) 3 NE UTC−8(−7DT) N39°17.98′ W114°50.51′ **LAS VEGAS**
6259 B S4 **FUEL** 100LL, JET A OX 3 Class II, ARFF Index A NOTAM FILE ELY **H–3C, L–9B**
RWY 18–36: H6018X150 (ASPH–PFC) S–70, D–85, DT–130 MIRL 0.6% up S **IAP**
RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 50′.
RWY 36: REIL. PAPI(P4L)—GA 3.0° TCH 50′.
RWY 12–30: H4814X60 (ASPH) S–15 MIRL 0.4% up SE
RWY 30: Tree.
AIRPORT REMARKS: Attended 1600–0100Z‡. Soft shoulders adjacent all rwys and taxiways. Rwy 12–30 not avbl for acft over 30 passenger seats. Svc charge for fuel after hours. Ultralight acft operating on Rwy 12 and in vicinity of arpt dalgt hours. ACTIVATE MIRL Rwy 12–30 and Rwy 18–36, PAPI Rwy 18 and Rwy 36, REIL Rwy 18 and Rwy 36—CTAF.
WEATHER DATA SOURCES: ASOS 120.625 (775) 289–4466.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.2 (RENO RADIO)
Ⓡ **SALT LAKE CENTER APP/DEP CON** 133.45
RADIO AIDS TO NAVIGATION: NOTAM FILE ELY.
(H) VORW/DME 110.6 ELY Chan 43 N39°17.90′ W114°50.90′ at fld. 6254/14E.
VOR/DME unusable:
008°–142° byd 10 NM blo 17,500′
008°–142° byd 20 NM
142°–163° byd 20 NM blo 11,500′
163°–293° byd 16 NM
293°–343° blo 13,000′
293°–343° byd 22 NM blo 14,000′
293°–343° byd 26 NM
343°–008° byd 21 NM blo 12,000′

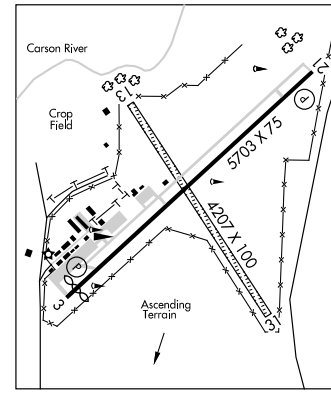


EMPIRE (1A8) 1 W UTC−8(−7DT) N40°34.68′ W119°21.16′ **KLAMATH FALLS**
3990 NOTAM FILE RNO
RWY 18–36: 3770X42 (DIRT)
RWY 18: Rgt tfc. P–line.
RWY 07–25: 3170X48 (DIRT)
RWY 07: Rgt tfc. **RWY 25:** Thld dsplcd 800′. P–line.
AIRPORT REMARKS: Unattended. No tkf Rwy 07 due to p–line and ball fld lgts +50′. Rwy 25 dsplcd thld marked by 8 white tires. Rwy 18–36 thlds marked with white tires. 1′ berms around all rwys.
COMMUNICATIONS: CTAF 122.9

EUREKA (Ø5U) 6 NW UTC−8(−7DT) N39°36.25′ W116°00.30′ **LAS VEGAS**
5954 B S4 **FUEL** 100LL, JET A NOTAM FILE RNO **H–3C, L–9B**
RWY 17–35: H7300X60 (ASPH–AFSC) S–30 HIRL
RWY 17: PAPI(P2L)—GA 3.0° TCH 45′.
RWY 35: PAPI(P2L)—GA 3.0° TCH 40′. P–line.
AIRPORT REMARKS: Attended 1600–0100Z‡. After hrs call out 775–237–6100. HIRL Rwy 17–35 preset low ints dusk–dawn, to increase ints ACTIVATE—CTAF.
COMMUNICATIONS: CTAF 122.9
RCO 122.3 (RENO RADIO)
RADIO AIDS TO NAVIGATION: NOTAM FILE EKO.
BULLION (L) VORW/DME 114.5 BQU Chan 92 N40°45.58′ W115°45.68′ 172° 70.2 NM to fld. 6464/17E.



FALLON MUNI (FLX) 2 NE UTC−8(−7DT) N39°29.95′ W118°44.93′ **SAN FRANCISCO**
3963 B S4 **FUEL** 100, JET A OX 4 TPA—4763(800) NOTAM FILE RNO **H–3B, L–9A**
RWY 03–21: H5703X75 (ASPH) S–17 MIRL **IAP**
RWY 03: PAPI(P2L)—GA 3.0° TCH 49′. Thld dsplcd 100′. Road.
RWY 21: PAPI(P2L)—GA 3.0° TCH 40′.
RWY 13–31: 4207X100 (DIRT)
RWY 13: Trees. **RWY 31:** Fence.
AIRPORT REMARKS: Attended 1600–0100Z‡. Ultralight activity invof arpt.
COMMUNICATIONS: CTAF/UNICOM 122.8
HAZEN RCO 122.1R 114.1T (RENO RADIO)
Ⓡ **NAVY FALLON APP/DEP CON** 120.85 (Mon thru Fri 1515–0645Z‡, Sat 1800–0200Z‡, Sun 2000–0200Z‡) exc holidays.
Ⓡ **OAKLAND CENTER APP/CON** 128.8
RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.
HAZEN (L) VORTAC 114.1 HZN Chan 88 N39°30.99′ W118°59.86′ 078° 11.6 NM to fld. 4080/17E.



FALLON NAS (VAN VOORHIS FLD) (NFL)(KNFL) NAS 3 NE UTC−8(−7DT) **SAN FRANCISCO**
N39°25.00′ W118°42.06′ **H–3B, L–9A**
3934 B TPA—See Remarks NOTAM FILE NFL Not insp. **DIAP, AD**
RWY 13R–31L: H14005X201 (PEM) PCN 45 R/C/W/T HIRL
RWY 13R: PAPI(P4L)—GA 3.0° TCH 48′. **RWY 31L:** PAPI(P4L)—GA 3.5° TCH 55′.
RWY 13L–31R: H11079X200 (CONC) PCN 70 R/C/W/T HIRL
RWY 13L: OLS. PAPI(P4L). **RWY 31R:** OLS.
RWY 07–25: H7004X154 (PEM) PCN 44 R/D/W/T HIRL
RWY 25: OLS.
ARRESTING GEAR/SYSTEM
RWY 13R HOOK E28(B) (1804′) HOOK E28(B) (1897′) **RWY 31L**
RWY 13L HOOK E28(B) (952′) HOOK E28(B) (954′) **RWY 31R**
RWY 07 HOOK E28(B) (1300′) HOOK E28(B) (1293′) **RWY 35**
MILITARY SERVICE: LGT Rwy 07–25 Portable. **A–GEAR** E–28(B) apch end Rwy 31R normally derigged.
JASU 1 (GTC–85) 1(NCPP–105) 2(NC–8A) **FUEL** J8. 4 hr prior notice rqr for acft req hot refuel.
FLUID SP LOX **TRAN ALERT** No transient maintenance/hanger space or de–ice avbl.
MILITARY REMARKS: Opr Mon–Fri 1515–0645Z‡, Sat 1800–0200Z‡, Sun 2000–0200Z‡, clsd holidays. See FLIP AP/1 Supplementary Arpt Remark. **RSTD** PPR 24 hr in advance for transient svc except MEDEVAC, Search and Rescue, deployed squadrons/CVW or scheduled logistics flight. PPR valid only 4 hr byd estimated time of arrival unless rescheduled, DSN 890–3415/3479, C775–426–3415/3479. **CAUTION** Rwy 13R centerline opr only due to Foreign Object Damage hazard. Radar twr 1.1 NM SW of control twr 167′ AGL. Large multi–engine acft full stop/touch and go land past E–28 A–Gear at apch ends. Twy C, S apron to apch end Rwy 25 varies in width tapering to 50′ wide E of Rwy 13R–31L. Twy D, S apron to apch end Rwy 07 50′ wide. Extensive bird activity within approximately 15 NM of arpt from surface to approximately 3000′ AGL. General aviation acft opr from Fallon Muni arpt 5 NM NNW. **TFC PAT** All acft activate ldg/taxi lgt while on apch. Reduced rwy separation standard in effect for USN/USMC acft. TPA—Initial all rwys 7600(3666), overhead break 5500(1566) no overhead for Rwy 07 pattern altitude 5000(1066). Due to extensive traffic acft req practice apch expect lengthy delays. **NS ABTMT** When dep Rwy 31L turn rgt, heading 040°, over dep end. All a cft ctc Operations Duty Officer, DSN 890–2419/2458, C775–426–2419/2458, prior to filing VFR, for noise sensitive area briefing. **MISC** Schedule of FRTC airspace outside of published airfield hrs will be allowed only after approval has been granted by the NAS Fallon Ops Officer to extd/modify published airfield hrs. Base OPS DSN 890–2419/2458, C775–426–2458. Logistics acft expect ASR/PAR apch.
COMMUNICATIONS: SFA **ATIS** 370.925 (Mon–Fri 1515–0645Z‡, Sat 1800–0200Z‡, Sun 2000–0200Z‡, clsd holidays.)
Ⓡ **NAVY FALLON APP/DEP CON** 120.85 360.2 (Mon–Fri 1515–0645Z‡, Sat 1800–0200Z‡, Sun 2000–0200Z‡, clsd holidays.), other times ctc Ⓡ**OAKLAND CENTER APP/DEP CON** 128.8 285.5
NAVY FALLON TOWER 119.25 340.2 (Mon–Fri 1515–0645Z‡, Sat 1800–0200Z‡, Sun 2000–0200Z‡, clsd holidays.)
GND CON 251.15 **CLNC DEL** 353.55
PMSV METRO 327.4 **BASE OPS** 238.0 **DESERT CON** 126.2 322.35 (Acft transient, using Fallon Range check in and out—call Desert Control.)
AIRSPACE: CLASS D svc Mon–Fri 1515–0645Z‡, Sat 1800–0200Z‡, Sun 2000–0200Z‡ except holidays other times CLASS E.
RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.
HAZEN (L) VORTAC 114.1 HZN Chan 88 N39°30.99′ W118°59.86′ 096° 15.0 NM to fld. 4080/17E.
(H) TACAN Chan 82 NFL (113.5) N39°25.01′ W118°42.29′ at fld. 3929/16E.
ASR/PAR
COMM/NAV/WEATHER REMARKS: Radar see Terminal FLIP for Radar Minima. Inbound transient helicopter ctc Tower 5 min prior to entering CLASS D airspace for entry procedure.

FERNLEY

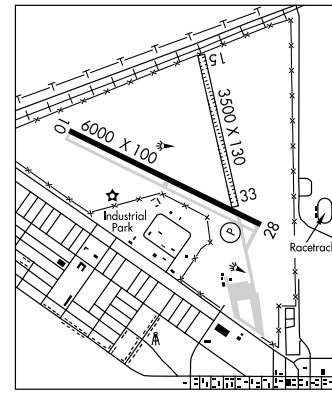
TIGER FLD (N58) 3S UTC−8(−7DT) N39°33.58′ W119°14.49′ **SAN FRANCISCO**
4346 NOTAM FILE RNO **L–9A**
RWY 15–33: H3974X40 (ASPH)
RWY 15: Rgt tfc. **RWY 33:** Hill.
RWY 05–23: 2750X40 (GRVL)
RWY 05: Road. **RWY 23:** Hill.
AIRPORT REMARKS: Unattended. Rwy 15–33 multiple cracks wider than 3 inches on rwy.
COMMUNICATIONS: CTAF 122.9
RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.
HAZEN (L) VORTAC 114.1 HZN Chan 88 N39°30.99′ W118°59.86′ 266° 11.6 NM to fld. 4080/17E.

GABBS (GAB) 4 NW UTC−8(−7DT) N38°55.45′ W117°57.54′ **LAS VEGAS**
4700 B NOTAM FILE RNO
RWY 08–26: 5900X65 (DIRT)
RWY 16–34: 2800X65 (DIRT)
AIRPORT REMARKS: Unattended. Rwy 08–26 and Rwy 16–34 no line of sight between runways. Recommend land Rwy 08, takeoff Rwy 26 wind permitting. Rwy 08–26 weeds +1′ full length of rwy. Rwy 16–34 weeds +1′ full length of rwy.
COMMUNICATIONS: CTAF 122.9

GOLDFIELD

LIDA JUNCTION (ØL4) 14 S UTC−8(−7DT) N37°29.15′ W117°11.45′ **LAS VEGAS**
4684 NOTAM FILE RNO
RWY 18–36: 6100X80 (DIRT)
RWY 18: Tree.
AIRPORT REMARKS: Unattended. Rwy 18–36 has uncontrolled vehicle access. +30′ pole 408′ from thld Rwy 18 on centerline extended. Rwy 18–36 edges marked with white tires.
COMMUNICATIONS: CTAF 122.9

HAWTHORNE INDUSTRIAL (HTH) 1 N UTC−8(−7DT) N38°32.66′ W118°38.06′ **SAN FRANCISCO H–3B, L–9A**
4215 B **FUEL** 100, JET A NOTAM FILE HTH
RWY 10–28: H6000X100 (ASPH) S–53, D–93, ST–118, DT–160 MIRL
RWY 10: REIL. **RWY 28:** REIL. PAPI(P2L)—GA 3.0° TCH 49′.
RWY 15–33: 3500X130 (DIRT)
RWY 15: Railroad.
AIRPORT REMARKS: Unattended. Ultralight activity on and invof arpt. Rwy 33 starts at north edge Rwy 10–28. ACTIVATE MIRL Rwy 10–28—CTAF 122.8.
WEATHER DATA SOURCES: AWOS–3 120.225 (775) 945–0727.
COMMUNICATIONS: CTAF/UNICOM 122.8
HAZEN RCO 122.1R 114.1T (RENO RADIO)
RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.
MINA (H) VORTAC 115.1 MVA Chan 98 N38°33.92′ W118°01.97′ 251° 28.3 NM to fld. 7860/17E. **HIWAS.**



HAZEN N39°30.99′ W118°59.86′ NOTAM FILE RNO. **SAN FRANCISCO H–3B, L–9A**
(L) VORTAC 114.1 HZN Chan 88 078° 11.6 NM to Fallon Muni. 4080/17E. VOR unusable 300°–320° beyond 30 NM below 9500′.
RCO 122.1R 114.1T (RENO RADIO)

HENDERSON EXECUTIVE (See LAS VEGAS)

JACKPOT/HAYDEN FLD (Ø6U) 0 E UTC−7(−6DT) N41°58.56′ W114°39.49′ **SALT LAKE CITY H–3C, L–11C**
5213 B **FUEL** 100LL NOTAM FILE RNO
RWY 15–33: H6200X60 (ASPH) S–12.5 MIRL
RWY 15: Building. **RWY 33:** VASI(V2L)—GA 3.5° TCH 55′. Hill.
AIRPORT REMARKS: Attended on call. Attended by Casino on call at 775–755–6595 or use frequency 122.8. For fuel call 775–755–6595 or use frequency 122.8. Bird hazard east of arpt at ponds. Bcn visibility lgtd from west. ACTIVATE MIRL Rwy 15–33—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.5 (RENO RADIO)
RADIO AIDS TO NAVIGATION: NOTAM FILE TWF.
TWIN FALLS (L) VORTACW 115.8 TWF Chan 105 N42°28.79′ W114°29.37′ 176° 31.1 NM to fld. 4140/18E.

JEAN (ØL7) 1 S UTC−8(−7DT) N35°46.10′ W115°19.78′ **LAS VEGAS**
2832 B **FUEL** 100LL, JET A TPA—3632(800) NOTAM FILE RNO **L–7E**
RWY 02L–20R: H4600X75 (ASPH) S–12.5 MIRL
RWY 02L: Pole. **RWY 20R:** Road. Rgt tfc.
RWY 02R–20L: H3700X60 (ASPH) S–12.5
RWY 02R: Rgt tfc. **RWY 20L:** Pole.
AIRPORT REMARKS: Unattended. Self–svc fuel 24 hours. Parachute Jumping. Skydiving drop zone 4 miles south. Ultralight activity on arpt. Aerobatic activities 2 miles W. Power acft use tfc pattern West of rwy; make entry from West. Power acft parking W side of fld. Glider parking E side of fld. ACTIVATE MIRL Rwy 02L–20R—CTAF. NOTE: See Special Notice—Aerobatic Practice Area Jean Airport, Jean, NV.
COMMUNICATIONS: CTAF 122.9
RADIO AIDS TO NAVIGATION: NOTAM FILE LAS.
LAS VEGAS (H) VORTACW 116.9 LAS Chan 116 N36°04.78′ W115°09.59′ 189° 20.4 NM to fld. 2141/15E.

KIDWELL (See CAL NEV ARI)

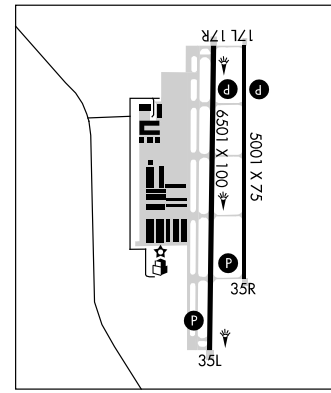
KINGSTON (N15) 2 E UTC−8(−7DT) N39°12.18′ W117°03.87′ **LAS VEGAS**
5950 E NOTAM FILE RNO
RWY 07–25: 3700X80 (GRVL–DIRT)
RWY 16–34: 3072X60 (GRVL–DIRT)
RWY 16: P–line. **RWY 34:** P–line. Rgt tfc.
AIRPORT REMARKS: Unattended. Rwy 07–25 edge and thld marked by white tires. Rwy 16 thld marked by white tires. Rwy 16–34 surface covered with weeds and grass to 1′.
COMMUNICATIONS: CTAF 122.9

LAKE TAHOE (See SOUTH LAKE TAHOE, CA)

LAS VEGAS N36°04.78′ W115°09.59′ NOTAM FILE LAS. **LAS VEGAS**
(H) VORTACW 116.9 LAS Chan 116 at McCarran Intl. 2141/15E. **H–4H, L–7E**
VORTAC unusable:
025°–160° byd 20 NM blo 6,000′
160°–200° byd 20 NM blo 9,000′
200°–220° byd 15 NM blo 9,000′
200°–025° byd 25 NM blo 11,000′
220°–245° byd 35 NM blo 15,000′
245°–260° byd 35 NM blo 14,000′
260°–275° byd 35 NM blo 14,000′
275°–310° byd 35 NM blo 16,500′
RCO 122.4 (RENO RADIO)

LAS VEGAS

HENDERSON EXECUTIVE (HND) 11 S UTC−8(−7DT) N35°58.37′ W115°08.07′ **LAS VEGAS**
2492 B **FUEL** 100LL, JET A OX 1, 2 TPA—3492(1000) NOTAM FILE HND **H–4H, L–7E**
RWY 17R–35L: H6501X100 (ASPH) S–30, D–60 MIRL 1.4% up S **IAP, AD**
RWY 17R: REIL. PAPI(P4L)—GA 3.0° TCH 40′.
RWY 35L: REIL. PAPI(P4L)—GA 3.5° TCH 40′. Road.
RWY 17L–35R: H5001X75 (ASPH) S–30, D–30 MIRL 1.4% up S
RWY 17L: REIL. PAPI(P4L)—GA 3.0°.
RWY 35R: REIL. PAPI(P4L)—GA 3.5°. Hill.
AIRPORT REMARKS: Attended 1300–0600Z‡. Self–svc fuel 100LL 24 hrs. Rwy 17L–35R is CLOSED 0400–1500Z‡. Extensive commercial air tour traffic arriving from SE at different times during dalgt hours. Acft departure Rwy 17R or Rwy 35L should verify that they are taking off from the rwy and not the parallel twy. PAPI Rwy 17L and Rwy 35R OTS indef. PAPI Rwy 35L OTS indef. MIRI Rwy 17L–35R OTS unless Rwy 17R–35L is clsd. ACTIVATE MIRL Rwy 17R–35L and Rwy 17L–35R, PAPI Rwy 17R and Rwy 35L, PAPI Rwy 17L and Rwy 35R REIL Rwy 17R and 35L REIL Rwy 17L and 35R and twy—CTAF. REIL Rwy 17L and 35R avbl only when Rwy 17R and 35L clsd.
WEATHER DATA SOURCES: ASOS 120.775 (702) 614–4537.
COMMUNICATIONS: CTAF 125.1 **ATIS** 120.775 (702) 614–4537
UNICOM 122.95
MOUNT POTOSI RCO 122.35 (RENO RADIO)
Ⓡ **LAS VEGAS APP/DEP CON** 118.4
TOWER 125.1 (1400–0400Z‡) **GND CON** 127.8
AIRSPACE: CLASS D svc 1400–0400Z‡ other times CLASS G.
RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.
BOULDER CITY (H) VORTACW 116.7 BLD Chan 114 N35°59.75′ W114°51.82′ 249° 13.3 NM to fld. 3650/15E. **HIWAS.**



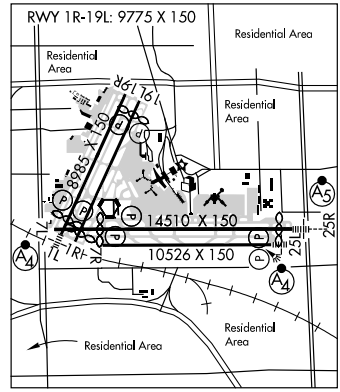
McCARRAN INTL (LAS) 5 S UTC−8(−7DT) N36°04.80′ W115°09.14′ **LAS VEGAS**
2181 B S4 **FUEL** 100, 100LL, JET A1 + OX 1, 2, 3 LRA Class I, ARFF Index E **H–4I, L–7E**
NOTAM FILE LAS **IAP, AD**

RWY 07L–25R: H14510X150 (ASPH–PFC) S–23, D–220, ST–175, DT–633, DDT–877 HIRL
RWY 07L: PAPI(P4L)—GA 3.0° TCH 75′. Thld dsplcd 2139′. Hangar. 1.1% down.
RWY 25R: MALSR. PAPI(P4L)—GA 3.0° TCH 84′. Thld dsplcd 1397′. 0.9% up.

RWY 07R–25L: H10526X150 (ASPH–PFC) S–23, D–220, ST–175, DT–633, DDT–914 HIRL
RWY 07R: REIL. PAPI(P4L)—GA 3.0° TCH 64′. Pole. 1.1% down.
RWY 25L: MALSF. PAPI(P4L)—GA 3.0° TCH 84′. 0.9% up.

RWY 01R–19L: H9775X150 (CONC–GRVD) S–23, D–220, ST–175, DT–633, DDT–877 MIRL
RWY 01R: REIL. PAPI(P4L)—GA 3.0° TCH 75′. Thld dsplcd 491′. Railroad. Rgt tfc. 1.1% down.
RWY 19L: REIL. PAPI(P4L)—GA 3.0° TCH 75′. Thld dsplcd 878′. Pole. 0.9% up.

RWY 01L–19R: H8985X150 (CONC–GRVD) S–30, D–145, ST–175, DT–460, DDT–833 HIRL
RWY 01L: REIL. MALSF. PAPI(P4L)—GA 3.40° TCH 57′. Thld dsplcd 584′. Railroad. 1.1% down.
RWY 19R: REIL. PAPI(P4L)—GA 3.0° TCH 75′. Fence. Rgt tfc. 1.0% up.



RUNWAY DECLARED DISTANCE INFORMATION

RWY 01L:	TORA–8985	TODA–8985	ASDA–8985	LDA–8401
RWY 01R:	TORA–9775	TODA–10172	ASDA–9441	LDA–8681
RWY 07L:	TORA–14510	TODA–15099	ASDA–14099	LDA–11966
RWY 19L:	TORA–9775	TODA–10175	ASDA–9685	LDA–8745
RWY 19R:	TORA–8985	TODA–9397	ASDA–8397	LDA–8397
RWY 25R:	TORA–14510	TODA–15155	ASDA–14155	LDA–12755

AIRPORT REMARKS: Attended continuously. Large numbers of birds and bats invof arpt btn SS–SR. Lgtd golf range 1400′ south of Rwy 01R–19L and Rwy 01L–19R. Extensive glider/soaring ops weekends and holidays, SR–SS, LAS 187/020, altitudes up to but not including FL 180. Gliders remain clear of the terminal control area but otherwise opr within the entire southwest quadrant of the terminal control area Veil. Acft may experience reflection of sun from glass hotels located northwest of arpt. Reflection may occur at various altitudes, headings and distances from arpt. Numerous helicopter ops on W side of arpt. Rwy 01L–19R 496,000 lbs GWT for L–1011, 555,000 lbs GWT for DC–10, 602,500 lbs GWT for MD–11. Acft using full length dep on Rwy 07L use minimal power until passing the power–up point on rwy. Power–up point is 348′ east of blast pad and marked with sign and standard markings for beginning of rwy. Turbojet dep not permitted Rwy 01R–19L or Rwy 01L–19R 0400–1600Z++. Exception for weather or operational necessity. All non–standard rwy ops PPR from Department of Aviation. Acft taxiing westbound on Twy B near Twy E use caution not to enter the rwy on Twy Y, acft taxiing westbound on Twy W near Twy E use caution not to enter the rwy on Twy W. Twy C no centerline lgts west of Twy B4, has edge lgts on south side of twy in this area. Directional twy signs will be incomplete due to construction. Acft larger than B757 PPR from Department of Aviation to use Twy H. Ops all terminal gates and cargo ramp controlled by Department of Aviation 1400–1000Z‡. All acft ctc ramp control on freq 129.175 for ops at A, B, C gates and charter intl gates, ctc Ramp Con on freq 127.9 for ops at D gates and cargo ramp prior to entering ramp or pushing back from gate or parking spot. From 1000–1400Z‡ ctc Gnd Con on freq 121.1 for ops at all gates and cargo ramp. Aircraft operating near the intersection of Twys S, D, G and the north end of Twy Z should be alert as there are closely aligned twy centerlines and radius turns. Acft that dep full length of Rwy 01L and Rwy 07L must hold at the same hold line, as there is no room to hold between the rwy ends, and such acft should verify that they are on the correct rwy. Acft dep Rwy 19R use minimal power passing the rwy thld. Rwy 19R thld has std rwy markings and is 780′ south of the blast pad. Landing Rights Airport: Customs avbl to general aviation acft 1600–0600Z‡, all other times PPR call 702–261–5539. General aviation acft requiring immigration/customs services must ctc Department of Aviation for parking arrangements minimum 2 hrs prior to arrival 702–261–3500 1500–0000Z++, all other times 702–261–4411. General aviation parking very limited. For parking availability ctc either FBO 702–736–1830 or 702–739–1100. Rotating bcn not visible 115°–240° southeast to southwest from twr. Rwy 07R REIL OTS indef. Tiedown fee. General aviation customs and immigration located west side of airfield between FBO's. Flight Notification Service (ADUCS) avbl. NOTE: See Special Notices—Intersection Departures During Period of Darkness, Grand Canyon Special Flight Rules Area.

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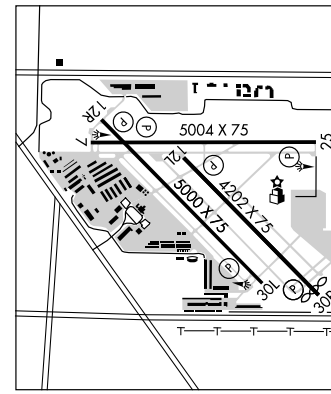
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WEATHER DATA SOURCES: ASOS (702) 736–1416.
COMMUNICATIONS: D-ATIS 132.4 (702) 736–0950. **UNICOM** 122.95
Ⓡ **LAS VEGAS APP CON** 125.025
Ⓡ **LAS VEGAS DEP CON** 125.9 (South)
LAS VEGAS TOWER 119.9 (Rwy 07L–25R and Rwy 07R–25L) 118.75 (Rwy 01L–19R and Rwy 01R–19L)
GND CON 121.9 (West of Rwy 01R–19L) 121.1 (East of Rwy 01R–19L) **CLNC DEL** 118.0
AIRSPACE: CLASS B See VFR Terminal Area Chart.
RADIO AIDS TO NAVIGATION: NOTAM FILE LAS.
LAS VEGAS (H) VORTACW 116.9 LAS Chan 116 N36°04.78′ W115°09.59′ at fld. 2141/15E.
ILS/DME 110.3 I–LAS Chan 40 Rwy 25R.
ILS 111.75 I–RLE Rwy 25L. Class IT. LOC unusable byd 19° south of course.
ILS 110.1 I–CUA Chan 38 Rwy 01L Class IB. LOC unusable byd 30° left of course. LOC unusable within .2 NM from thld.

NORTH LAS VEGAS (VGT) 3 NW UTC−8(−7DT) N36°12.64′ W115°11.67′

LAS VEGAS
H–4H, L–7E
IAP, AD

2205 B S4 **FUEL** 100LL, JET A TPA—3005(800) Class III, ARFF Index A.
NOTAM FILE VGT
RWY 07–25: H5004X75 (ASPH) S–30 MIRL 0.6% up W
RWY 07: PAPI(P4L)—GA 3.0° TCH 37′. Pole.
RWY 25: PAPI(P4L)—GA 3.0° TCH 36′.
RWY 12R–30L: H5000X75 (ASPH) S–30 MIRL 0.8% up NW
RWY 12R: PAPI(P4L)—GA 3.0° TCH 25′. Building.
RWY 30L: MIRL. PAPI(P4L)—GA 3.0° TCH 45′. P–line.
RWY 12L–30R: H4202X75 (ASPH) S–30 MIRL 1.0% up NW
RWY 12L: PAPI(P4L)—GA 3.0° TCH 40′. Bldg.
RWY 30R: PAPI(P4L)—GA 3.0° TCH 40′. Thld dsplcd 202′. P–line.



LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 25	12R–30L	4000
RWY 30L	07–25	4000

AIRPORT REMARKS: Attended 1400–0600Z‡. Rwy 07–25 and Rwy 12L–30R and Rwy 12R–30L have aiming point marking at 1000′ on all runways. Rwy guard lights at all intersections. Twy R clsd indef. When twr clsd ACTIVATE MIRL Rwy 07–25 and Rwy 12L–30R and twy lgts.—CTAF. Rwy 30R PAPI OTS indef.
WEATHER DATA SOURCES: ASOS 118.05 (702) 648–6633. LAWRS.
COMMUNICATIONS: CTAF 125.7 **ATIS** 118.05 **UNICOM** 122.95
NELLIS APP CON 118.125 (Rwy 12)
LAS VEGAS DEP CON 119.4 (Rwy 12)
LAS VEGAS APP/DEP CON 119.4 (Rwy 30)
TOWER 125.7 (Oct–Mar 1400–0400Z‡, Apr–Sep 1400–0500Z‡) **CLNC DEL** 124.0 **GND CON** 121.7
AIRSPACE: CLASS D svc Oct–Mar 1400–0400Z‡, Apr–Sep 1400–0500Z‡ other times CLASS G.
RADIO AIDS TO NAVIGATION: NOTAM FILE LAS.
LAS VEGAS (H) VORTACW 116.9 LAS Chan 116 N36°04.78′ W115°09.59′ 333° 8.2 NM to fld. 2141/15E.
ILS/DME 110.7 I–HWG Chan 44 Rwy 12L. Class IT. ILS unmonitored when twr clsd.

LIDA JUNCTION (See GOLDFIELD)

LINCOLN CO (See PANACA)

LOVELOCK N40°07.49′ W118°34.66′ NOTAM FILE LOL.

KLAMATH FALLS
H–3B, L–9A, 11A

(L) VORTACW 116.5 LLC Chan 112 155° 3.6 NM to Derby Fld. 4784/16E. **HIWAS.**
VORTAC unusable:
225°–235° byd 25 NM blo 9,600′
235°–260° byd 15 NM blo 15,500′
260°–305° byd 25 NM blo 13,000′
340°–360° byd 25 NM blo 10,500′
RCO 122.4 (RENO RADIO)

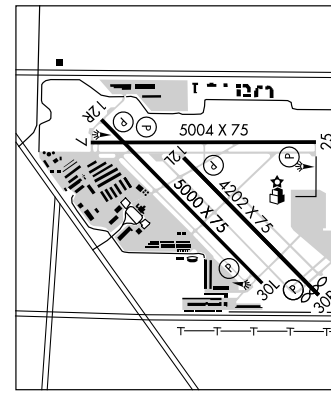
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WEATHER DATA SOURCES: ASOS (702) 736–1416.
COMMUNICATIONS: D-ATIS 132.4 (702) 736–0950. **UNICOM** 122.95
Ⓡ **LAS VEGAS APP CON** 125.025
Ⓡ **LAS VEGAS DEP CON** 125.9 (South)
LAS VEGAS TOWER 119.9 (Rwy 07L–25R and Rwy 07R–25L) 118.75 (Rwy 01L–19R and Rwy 01R–19L)
GND CON 121.9 (West of Rwy 01R–19L) 121.1 (East of Rwy 01R–19L) **CLNC DEL** 118.0
AIRSPACE: CLASS B See VFR Terminal Area Chart.
RADIO AIDS TO NAVIGATION: NOTAM FILE LAS.
LAS VEGAS (H) VORTACW 116.9 LAS Chan 116 N36°04.78′ W115°09.59′ at fld. 2141/15E.
ILS/DME 110.3 I–LAS Chan 40 Rwy 25R.
ILS 111.75 I–RLE Rwy 25L. Class IT. LOC unusable byd 19° south of course.
ILS 110.1 I–CUA Chan 38 Rwy 01L Class IB. LOC unusable byd 30° left of course. LOC unusable within .2 NM from thld.

NORTH LAS VEGAS (VGT) 3 NW UTC−8(−7DT) N36°12.64′ W115°11.67′

LAS VEGAS
H–4H, L–7E
IAP, AD

2205 B S4 **FUEL** 100LL, JET A TPA—3005(800) Class III, ARFF Index A.
NOTAM FILE VGT
RWY 07–25: H5004X75 (ASPH) S–30 MIRL 0.6% up W
RWY 07: PAPI(P4L)—GA 3.0° TCH 37′. Pole.
RWY 25: PAPI(P4L)—GA 3.0° TCH 36′.
RWY 12R–30L: H5000X75 (ASPH) S–30 MIRL 0.8% up NW
RWY 12R: PAPI(P4L)—GA 3.0° TCH 25′. Building.
RWY 30L: MIRL. PAPI(P4L)—GA 3.0° TCH 45′. P–line.
RWY 12L–30R: H4202X75 (ASPH) S–30 MIRL 1.0% up NW
RWY 12L: PAPI(P4L)—GA 3.0° TCH 40′. Bldg.
RWY 30R: PAPI(P4L)—GA 3.0° TCH 40′. Thld dsplcd 202′. P–line.



LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 25	12R–30L	4000
RWY 30L	07–25	4000

AIRPORT REMARKS: Attended 1400–0600Z‡. Rwy 07–25 and Rwy 12L–30R and Rwy 12R–30L have aiming point marking at 1000′ on all runways. Rwy guard lights at all intersections. Twy R clsd indef. When twr clsd ACTIVATE MIRL Rwy 07–25 and Rwy 12L–30R and twy lgts.—CTAF. Rwy 30R PAPI OTS indef.
WEATHER DATA SOURCES: ASOS 118.05 (702) 648–6633. LAWRS.
COMMUNICATIONS: CTAF 125.7 **ATIS** 118.05 **UNICOM** 122.95
NELLIS APP CON 118.125 (Rwy 12)
LAS VEGAS DEP CON 119.4 (Rwy 12)
LAS VEGAS APP/DEP CON 119.4 (Rwy 30)
TOWER 125.7 (Oct–Mar 1400–0400Z‡, Apr–Sep 1400–0500Z‡) **CLNC DEL** 124.0 **GND CON** 121.7
AIRSPACE: CLASS D svc Oct–Mar 1400–0400Z‡, Apr–Sep 1400–0500Z‡ other times CLASS G.
RADIO AIDS TO NAVIGATION: NOTAM FILE LAS.
LAS VEGAS (H) VORTACW 116.9 LAS Chan 116 N36°04.78′ W115°09.59′ 333° 8.2 NM to fld. 2141/15E.
ILS/DME 110.7 I–HWG Chan 44 Rwy 12L. Class IT. ILS unmonitored when twr clsd.

LIDA JUNCTION (See GOLDFIELD)

LINCOLN CO (See PANACA)

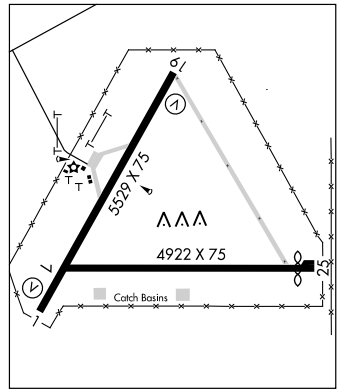
LOVELOCK N40°07.49′ W118°34.66′ NOTAM FILE LOL.

KLAMATH FALLS
H–3B, L–9A, 11A

(L) VORTACW 116.5 LLC Chan 112 155° 3.6 NM to Derby Fld. 4784/16E. **HIWAS.**
VORTAC unusable:
225°–235° byd 25 NM blo 9,600′
235°–260° byd 15 NM blo 15,500′
260°–305° byd 25 NM blo 13,000′
340°–360° byd 25 NM blo 10,500′
RCO 122.4 (RENO RADIO)

LOVELACE

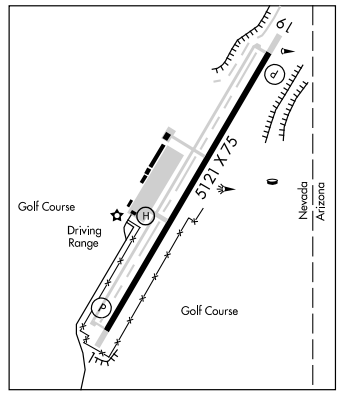
DERBY FLD (LOL) 8 SW UTC−8(−7DT) N40°03.99′ W118°33.91′ — KLAMATH FALLS
3904 B **FUEL** 100LL TPA—4704(800) NOTAM FILE LOL — H–3B, L–9A, 11A
RWY 01–19: H5529X75 (ASPH) S–30 MIRL — IAP
RWY 01: REIL. VASI (V2L)—GA 3.0° TCH 40′.
RWY 19: REIL. VASI(V2L)—GA 3.0° TCH 40′. Fence.
RWY 07–25: H4922X75 (ASPH) S–17
RWY 25: Thld dsplcd 120′. Fence
AIRPORT REMARKS: Unattended. Fuel 24 hr self svc. Rwy 01–19 no line of sight between runways. ACTIVATE MIRL Rwy 01–19, and REIL Rwy 01 and Rwy 19—CTAF.
WEATHER DATA SOURCES: ASOS 120.675 **HIWAS** 116.5 LLC.
COMMUNICATIONS: CTAF/UNICOM 122.8
LOVELOCK RCO 122.4 (RENO RADIO)
OAKLAND CENTER APP/DEP CON 128.8
RADIO AIDS TO NAVIGATION: NOTAM FILE LOL.
LOVELOCK (L) VORTACW 116.5 LLC Chan 112 N40°07.49′ W118°34.66′ 155° 3.6 NM to fld. 4784/16E. **HIWAS.**



McCARRAN INTL (See LAS VEGAS)

MERCURY N36°37.65′ W116°01.65′ NOTAM FILE RNO. — LAS VEGAS
NDB (HW) 326 MCY 275° 39.2 NM to Beatty. SHUTDOWN. — L–9B
NDB unusable 290°–070°.

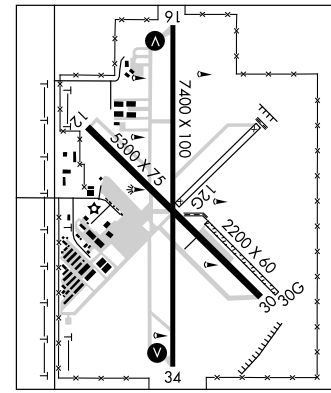
MESQUITE (67L) 2N UTC−8(−7DT) N36°49.99′ W114°03.35′ — LAS VEGAS
1978 B **FUEL** 100LL, JET A NOTAM FILE RNO — H–4I, L–9C
RWY 01–19: H5121X75 (ASPH) S–30 MIRL
RWY 01: REIL. PAPI(P2L)—GA 3.0° TCH 40′.
RWY: 19: REIL. PAPI(P2L)—GA 3.0° TCH 40′. Hill.
AIRPORT REMARKS: Attended 1500–0100Z‡. Credit card fuel avbl. Parachute Jumping. Rwy 01–19 severe drop off –20′ 90′ right and parallel to centerline. Golf courses and driving ranges within 1000′ of rwy centerline. Noise abatement procedure avoid flying over downtown Mesquite located 2NM SW of arpt. ACTIVATE MIRL Rwy 01–19—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **L.A. CENTER APP/DEP CON** 124.2
RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.
MORMON MESA (L) VORTAC 114.3 MMM Chan 90 N36°46.16′ W114°16.65′ 054° 11.3 NM to fld. 2120/16E. **HIWAS.**
• • • • • • • • • • • • • • • • •
HELIPAD H1: H20X20 (CONC)
HELIPORT REMARKS: Rwy H1 has 15′ building 50′ SW of pad.



MINA N38°33.92′ W118°01.97′ NOTAM FILE RNO. — SAN FRANCISCO
(H) VORTAC 115.1 MVA Chan 98 251° 28.3 NM to Hawthorne Industrial. 7860/17E. **HIWAS.** — H–3B, L–9A
VORTAC unusable 130°–160° beyond 28 NM below 10,700′.
RCO 122.1R 115.1T (RENO RADIO)

MINA (3QØ) 0 SE UTC−8(−7DT) N38°23.00′ W118°06.06′ — SAN FRANCISCO
4552 NOTAM FILE RNO
RWY 13–31: 4600X165 (DIRT)
AIRPORT REMARKS: Unattended. Remote controlled acft invof arpt. Rwy 13–31 has uncontrolled vehicle access. Ultralights on and invof arpt. Mountains 1 mile E of fld. Rwy 13 and Rwy 31 thld marked with white tires. Rwy 13–31 has 2′ berms on both sides full length of rwy.
COMMUNICATIONS: CTAF 122.9

MINDEN–TAHOE (MEV) 4 N UTC−8(−7DT) N39°00.06′ W119°45.12′ — SAN FRANCISCO H–3B, L–9A
4722 B S4 **FUEL** 100LL, JET A OX 1, 3 NOTAM FILE MEV — IAP, AD
RWY 16–34: H7400X100 (ASPH) S–30, D–50 MIRL
RWY 16: VASI(V4R)—GA 3.0° TCH 31′. Rgt tfc.
RWY 34: VASI(V4L)—GA 3.0° TCH 31′.
RWY 12–30: H5300X75 (ASPH) S–30, D–50 0.4% up SE
RWY 12: Pole. Rgt tfc.
RWY 12G–30G: 2200X60 (DIRT)
RWY 12G: Brush.
AIRPORT REMARKS: Attended 1600–0000Z‡. Deer and flocks of large birds on and in vicinity of arpt. Rwy 12G–30G thld marked with orange and white panels. Ultralight and balloon activity on and invof arpt. Glided activity on and invof arpt. For emergencies after 0000Z‡ hrs ctc 775–782–5126. Trees 1,000′ from apch end Rwy 12. Ditch in obstacle free zone adjacent SW end Twy C. PAEW occasionally on rwys and twys. Noise abatement procedures in effect, for information ctc 775–782–9871. Sailplane tfc pattern Rwy 30 and Rwy 34 rgt tfc. Snow removal during dalgt hours only. Rwy 30G ldgs only; no tkf or ldg Rwy 12G. ACTIVATE MIRL Rwy 16–34, VASI Rwy 16 and Rwy 34—CTAF. NOTE: See Special Notices—Glider/Soaring Activities Around the Reno-Tahoe International Airport.



WEATHER DATA SOURCES: AWOS–3 119.325 (775) 782–6264.
COMMUNICATIONS: CTAF/UNICOM 123.05
RENO APP/DEP CON 119.2
RADIO AIDS TO NAVIGATION: NOTAM FILE MEV.
MUSTANG (H) VORTACW 117.9 FMG Chan 126 N39°31.88′ W119°39.37′ 172° 32.1 NM to fld. 5949/16E.
COMM/NAV/WEATHER REMARKS: For clnc del call Reno apch con on (775) 348–8840.

MORMON MESA N36°46.16′ W114°16.65′ NOTAM FILE RNO. — LAS VEGAS H–4I, L–9B
(L) VORTAC 114.3 MMM Chan 90 198° 14.5 NM to Perkins Fld. 2120/16E. **HIWAS.**
VORTAC unusable:
060°–075° beyond 27 NM below 9500′
075°–110° beyond 32 NM below 9600′
110°–135° beyond 10 NM
280°–335° beyond 22 NM below 9000′
RCO 122.1R 114.3T (RENO RADIO)

MOUNT LEWIS N40°24.18′ W116°52.09′ — SALT LAKE CITY H–3C, L–9B
RCO 122.65 (RENO RADIO)

MOUNT POTOSI N35°56.65′ W115°29.87′ — LAS VEGAS L–7D
RCO 122.35 (RENO RADIO)

MUSTANG N39°31.88′ W119°39.37′ NOTAM FILE RNO. — SAN FRANCISCO H–3B, L–9A
(H) VORTACW 117.9 FMG Chan 126 234° 5.5 NM to Reno/Tahoe Intl. 5949/16E.
VORTAC unusable 200–230° beyond 30 NM below 13,000′

NELLIS AFB (LSV)(KLSV) AF 7 NE UTC−8(−7DT) N36°14.17′ W115°02.06′ **LAS VEGAS**
1870 B TPA—See Remarks NOTAM FILE LSV Not Insp. **H–4I, L–7E**
RWY 03L–21R: H10123X200 (CONC) **DIAP, AD**
PCN 43 R/C/W/T HIRL
RWY 03L: PAPI—GA 3.0°. **RWY 21R:** PAPI—GA 3.0°. Rgt tfc. 0.3% down.
RWY 03R–21L: H10055X150 (CONC) PCN 52 R/C/W/T HIRL
RWY 03R: ALSF1. PAPI—GA 3.0°. **RWY 21L:** ALSF1. PAPI—GA 3.0°. Rgt tfc. 0.4% down.
ARRESTING GEAR/SYSTEM
RWY 03L HOOK BAK–12B(B) (40′ OVRN) HOOK BAK–12B(B) (1210′)
HOOK BAK–12B(B) (1452′) HOOK BAK–12B(B) (42′ OVRN) **RWY 21R**
RWY 03R HOOK BAK–12(B) (37′ OVRN) HOOK BAK–12B(B) (1225′)
HOOK BAK–12B(B) (1199′) HOOK BAK–12B(B) (46′ OVRN) **RWY 21L**
MILITARY SERVICE: LGT All rwy thld lgts gated. Rwy 21L PAPI Rwy Reference Point and ILS Rwy Point of Intercept not coincidental. All sequence flashing lgts on Rwy 21L. 1.5′ to right of extended centerline. **A–GEAR** All BAK–12B extended and in raised position, rqr 15 minute prior notice for removal. **JASU** No starter unit or starting capability for F4B, F4J acft. No starter probe for USN acft. 2(MA–1A) **FUEL** J8. Fuel will not be ordered until acft is parked. **FLUID** W. Expect 2–3 hr delay. SP PRESAIR LHOX LOX **OIL** O–123–128–132–133–148–156 SOAP **TRAN ALERT** Opr 1430–0630Z‡, no quick turn Fri–Sun. No military fleet svc avbl, limited transient svc avbl. No transient acft can arr/dep prior to 1430Z‡ and must arr/dep no later than 0600Z‡. Fleet svc is avbl from Signature Flight Support C702–261–3583/3529, 48 hr prior notice rqr. Progressive taxi avbl.
MILITARY REMARKS: See FLIP AP/1 Supplementary Arpt Remarks. **RSTD** PPR all except Distinguished Visitor code 7 or abv and emergency AIREVAC, PPR issued 1430–0630Z‡. Remain overnight req good for one night only. Acft must adhere to PPR arr block +/− 60 minutes of scheduled ldg. Extensive Large Force Exercise (LFE) activity. PPR arr not authorized during Red Flag (RF) or LFE launch/recovery period, check NOTAM for date/time. No PPR arr during night RF/LFE opr. Multi apch not authorized during RF/LFE or after official SS unless approved by 57 WG SOF.PPR's may be obtained up to 7 days prior to planned arr. Req for additional acft from a base that has met the maximum allowed (4) will be considered 3 days prior to scheduled arr, support and space permission. During RF/LFE periods, PPR's may be req up to 7 days prior to arr but issued no earlier than 24 hrs prior to planned arr. All inbound passenger/cargo and Distinguished Visitor acft must ctc Command Post (Raymond 22) on 381.300, no later than 30 min prior to ldg. PPR for transient fighter/Distinguished Visitor acft ctc AM OPS DSN 682–4600/01, C702–652–4600. PPR for exercise, deployment, C130 and larger acft ctc Nellis Support Center DSN 682–5250/5231 Mon–Fri 1430–0030Z‡. Sun and holiday tfc expect arr from N, dep N winds permitting with tfc pattern towards E (Sunrise Mt). Acft with VIP 7 or higher ctc PTD when 100 NM out. Opr rstd during Bird Watch Condition Moderate (tkf or ldg permission only when dep and arr avoid identified bird activity, no local IFR/VFR tfc pattern activity) and Severe (tkf and ldg prohibited without OG/CC or designated official approval). Hot Cargo Pad unlit and rstd to daylight/VFR ops. **CAUTION** Parachute Jumping. Steeply rising terrain S and E of centerline rwy 03R–21L. Rwy 03L–21R has high potential for hydroplaning. 200′ cranes N of dep end Rwy 03L. Acft taxiing on Twy D between Twy F and Rwy 21R use caution, 4′8″ high distance remaining marker located 125′ N Twy D centerline. **TFC PAT** TPA—Rectangular 3000(1130), overhead 3500(1630). Acft dep will not climb above 3000′ until past the dep end of rwy. **NS ABTMT** ACC quiet hr policy in effect 0630–1400Z‡. **MISC** First 1320′ Rwy 21R and first 920′ Rwy 03L grooved concrete. Mid 7879′ Rwy 03L–21R center 80′ concrete, balance asphalt. Acft dep on radar vectors must maintain 300′ per NM minimum climb. E side 9000′–1000′ distance remaining markers Rwy 21L not avbl. Transient acft shall communicate with Nellis ATC facility on UHF to the maximum extent possible due to heavy concentration of acft in the VFR pattern. Reduced Same Runway Separation will be applied to base assign/deployed acft in accordance with NAFBI 11–250, see (https://wwwmil.nellis.af.mil/units/99cs/scs/) see NAFBI 11–250.pdf. Wx opr 0700Z‡ Mon thru 2300Z‡ Fri, clsd weekends and holidays. Wx obsn view of Rwy 03R and 03L apch end rstd by flight facility; obsn view rstd fr 190°–330° by flightline facility and buildings; night obsn ltd due to high ints ramp lgt. Wx brief for tran aircrews byd normal opr hr avbl via 25 Operational Wx Squadron at Davis Monthan AFB DSN: 228–6598/6599, C(520)228–6598/6599. Bldgs (and floodlights at night) block the wx forcaster's view of the AER 03. No classified material storage available at AM ops. All classified must be stored in the Nellis AFB command post. For CSTMS and AG, ctc Nellis Support Center for C–130 and larger framed acft at DSN 682–5250 or ctc Base Ops for all other acft at DSN 682–4600 24 hrs prior to arrival.
COMMUNICATIONS: SFA **ATIS** 270.1 **PTD** 139.3 372.2 (Unreliable 085°–155° byd 35 NM at FL200, 315°–005° byd 40 NM at FL200, 230°–290° byd 55 NM at FL200.)
Ⓡ **APP CON** 118.125 124.95 273.55 291.725
TOWER 132.55 327.0 **GND CON** 121.8 275.8
Ⓡ **DEP CON** 135.1 385.4 **CLNC DEL** 120.9 289.4
ACC COMD POST (RAYMOND 22) 320.0 381.3 (381.3 Have quick timing avbl.) **ALCE AMC** 257.35 259.95 (Opr only during Red Flag deployment/change over/redeployment and other exercises.) **PMSV METRO** 323.9 (Full service avbl during wx station opr hrs otherwise not avbl. PMSV unreliable 085°–155° byd 35 NM at or below FL200, 315°–005° byd 40 NM at or below FL200, 230°–290° byd 55 NM at or below FL200.) **SOF** (BULLSEYE SOF) 305.6

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RADIO AIDS TO NAVIGATION: NOTAM FILE LAS.

LAS VEGAS (H) VORTACW 116.9 LAS Chan 116 N36°04.78′ W115°09.59′ 018° 11.2 NM to fld. 2141/15E. No NOTAM MP Sat 1600–1800Z‡.

(L) TACAN Chan 12 LSV (135.5) N36°14.68′ W115°01.50′ at fld. 1864/15E. NOTAM FILE RNO. No NOTAM MP Wed 0900–1100Z‡.

TACAN unusable:

360°–020° byd 20 NM blo 8,000′
360°–020° byd 26 NM blo 12,000′
020°–035° byd 30 NM blo 8,000′
035°–080° byd 20 NM
080°–155° byd 5 NM blo 10,000′
080°–155° byd 15 NM
285°–350° byd 20 NM blo 11,000′
285°–350° byd 26 NM blo 15,000′
285°–350° byd 33 NM
350°–360° byd 20 NM blo 9,000′
350°–360° byd 26 NM blo 15,000′

ILS/DME 109.1 I–DIQ Chan 12 Rwy 21L. No NOTAM MP: ILS Tue and Thu 0900–1100Z‡. ILS 21L DME from LSV TACAN.

NORTH FORK

STEVENS–CROSBY (Ø8U) 3 NW UTC−8(−7DT) N41°30.94′ W115°51.59′ **SALT LAKE CITY**

6397 NOTAM FILE RNO

RWY 01–19: 3600X50 (DIRT)

RWY 19: Fence.

AIRPORT REMARKS: Unattended. Rwy 01–19 has 6 to 8″ ruts north 1500′ of rwy. First 500′ of Rwy 01 rough, uneven and rutted. Rwy 01 terrain drops off 100′ end of rwy. Rwy 01–19 has uncontrolled vehicle and livestock access.

COMMUNICATIONS: CTAF 122.9

NORTH LAS VEGAS (See LAS VEGAS)

OVERTON

ECHO BAY (ØL9) 14 S UTC−8(−7DT) N36°18.67′ W114°27.83′ **LAS VEGAS L–7E**

1535 NOTAM FILE RNO

RWY 06–24: H3400X50 (ASPH) S–12.5

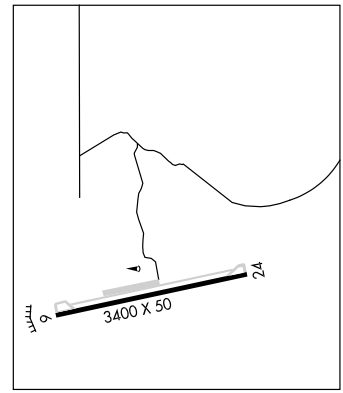
RWY 06: Fence. **RWY 24:** Fence. Rgt tfc.

AIRPORT REMARKS: Attended on call. Monitor unicom 122.8 for taxi svc to resort area.Livestock on and in vicinity of arpt. Parallel twy rough and infrequently used.

COMMUNICATIONS: CTAF/UNICOM 122.8

RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.

BOULDER CITY (H) VORTACW 116.7 BLD Chan 114 N35°59.75′ W114°51.82′ 031° 27.3 NM to fld. 3650/15E. **HIWAS.**



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RADIO AIDS TO NAVIGATION: NOTAM FILE LAS.

LAS VEGAS (H) VORTACW 116.9 LAS Chan 116 N36°04.78′ W115°09.59′ 018° 11.2 NM to fld. 2141/15E. No NOTAM MP Sat 1600–1800Z‡.

(L) TACAN Chan 12 LSV (135.5) N36°14.68′ W115°01.50′ at fld. 1864/15E. NOTAM FILE RNO. No NOTAM MP Wed 0900–1100Z‡.

TACAN unusable:

360°–020° byd 20 NM blo 8,000′
360°–020° byd 26 NM blo 12,000′
020°–035° byd 30 NM blo 8,000′
035°–080° byd 20 NM
080°–155° byd 5 NM blo 10,000′
080°–155° byd 15 NM
285°–350° byd 20 NM blo 11,000′
285°–350° byd 26 NM blo 15,000′
285°–350° byd 33 NM
350°–360° byd 20 NM blo 9,000′
350°–360° byd 26 NM blo 15,000′

ILS/DME 109.1 I–DIQ Chan 12 Rwy 21L. No NOTAM MP: ILS Tue and Thu 0900–1100Z‡. ILS 21L DME from LSV TACAN.

NORTH FORK

STEVENS–CROSBY (Ø8U) 3 NW UTC−8(−7DT) N41°30.94′ W115°51.59′ **SALT LAKE CITY**

6397 NOTAM FILE RNO

RWY 01–19: 3600X50 (DIRT)

RWY 19: Fence.

AIRPORT REMARKS: Unattended. Rwy 01–19 has 6 to 8″ ruts north 1500′ of rwy. First 500′ of Rwy 01 rough, uneven and rutted. Rwy 01 terrain drops off 100′ end of rwy. Rwy 01–19 has uncontrolled vehicle and livestock access.

COMMUNICATIONS: CTAF 122.9

NORTH LAS VEGAS (See LAS VEGAS)

OVERTON

ECHO BAY (ØL9) 14 S UTC−8(−7DT) N36°18.67′ W114°27.83′ **LAS VEGAS L–7E**

1535 NOTAM FILE RNO

RWY 06–24: H3400X50 (ASPH) S–12.5

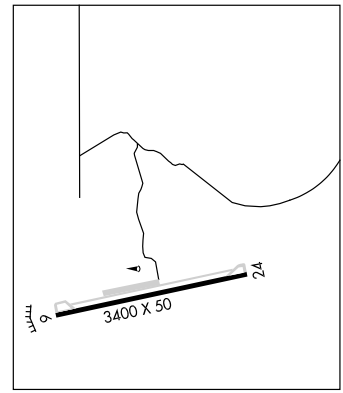
RWY 06: Fence. **RWY 24:** Fence. Rgt tfc.

AIRPORT REMARKS: Attended on call. Monitor unicom 122.8 for taxi svc to resort area.Livestock on and in vicinity of arpt. Parallel twy rough and infrequently used.

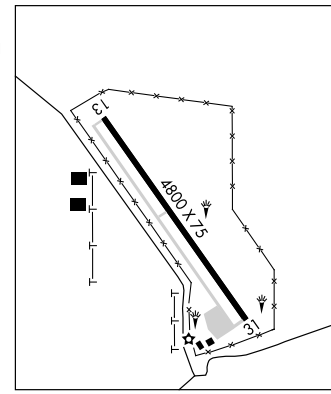
COMMUNICATIONS: CTAF/UNICOM 122.8

RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.

BOULDER CITY (H) VORTACW 116.7 BLD Chan 114 N35°59.75′ W114°51.82′ 031° 27.3 NM to fld. 3650/15E. **HIWAS.**



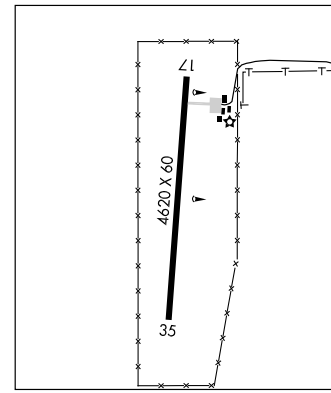
PERKINS FLD (UØ8) 2 N UTC−8(−7DT) N36°34.08′ W114°26.60′ LAS VEGAS
1358 B **FUEL** 100 TPA—2158(800) NOTAM FILE RNO L–7E
RWY 13–31: H4800X75 (ASPH) S–30 MIRL
RWY 13: Fence. **RWY 31:** Road. Rgt tfc.
AIRPORT REMARKS: Attended Thu–Mon dalgt hrs. Tues and Wed svc avbl on call 702–397–8457. Ultralight activity on and invof arpt. ACTIVATE MIRL Rwy 13–31—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8
RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.
MORMON MESA (L) VORTAC 114.3 MMM Chan 90 N36°46.16′ W114°16.65′ 198° 14.5 NM to fld. 2120/16E. **HIWAS.**



OWYHEE (1ØU) 4 W UTC−8(−7DT) N41°57.19′ W116°11.26′ SALT LAKE CITY
5374 NOTAM FILE RNO
RWY 02–20: 6700X60 (ASPH–GRVL)
AIRPORT REMARKS: Unattended. Livestock on and invof arpt. Be alert to acft parked on thld of Rwy 02–20. Rwy 02–20 weeds to +5′ both sides of rwy. Rwy 02–20 rough. Rwy 02–20 unrestricted motor vehicle access on rwy. Rwy 02–20 snow and ice on rwy during winter months.
COMMUNICATIONS: CTAF 122.9

PANACA

LINCOLN CO (1L1) 2 W UTC−8(−7DT) N37°47.25′ W114°25.30′ LAS VEGAS
4828 B TPA—5628(800) NOTAM FILE RNO L–9B
RWY 17–35: H4620X60 (ASPH) S–12.5 MIRL
RWY 17: Hill.
AIRPORT REMARKS: Attended continuously. ACTIVATE MIRL Rwy 17–35—122.8.
COMMUNICATIONS: CTAF/UNICOM 122.8
RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.
WILSON CREEK (H) VORTAC 116.3 ILC Chan 110 N38°15.01′ W114°23.66′ 167° 27.8 NM to fld. 9318/16E.



PARKER CARSON (See CARSON CITY)

PERKINS FLD (See OVERTON)

RENO

RENO/STEAD (RTS) 10 NW UTC−8(−7DT) N39°40.09′ W119°52.59′ **SAN FRANCISCO H–3B, L–9A, 11A IAP**

5050 B S4 **FUEL** 100LL, JET A 0X 1, 3 TPA—See Remarks NOTAM FILE RNO

RWY 14–32: H9000X150 (ASPH–GRVD) S–65, D–85, ST–108 HIRL

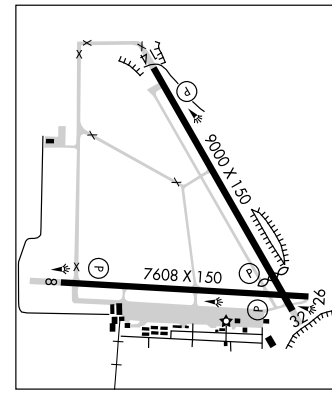
RWY 14: REIL. PAPI(P4L)—GA 3.0° TCH 40′.

RWY 32: REIL. PAPI(P4L)—GA 3.0° TCH 40′. Thld dsplcd 1200′. Rgt tfc.

RWY 08–26: H7608X150 (ASPH–GRVD) S–60, D–90, ST–114 HIRL 0.8% up E

RWY 08: REIL. PAPI(P4L)—GA 3.0° TCH 40′.

RWY 26: REIL. PAPI(P4L)—GA 3.0° TCH 40′. Rgt tfc.



AIRPORT REMARKS: Attended 1600–0100Z‡. Attendant on call 24 hours 775–328–6600. Parachute Jumping. Ultralight activity on and invof arpt. Military parachute ops north of arpt. C-130 night parachute ops and low level flight training on arpt. Extensive army guard helicopter ops invof arpt. Be alert for balloon traffic NW quadrant of arpt. PAEW occasionally on rwys and twys. Extensive tanker ops during fire season. TPA—5850(800), 6250(1200) heavy/high performance acft, 6050 (1000) glider acft left tfc to south side of Rwy 26 on dirt shoulder. Avoid overflight of housing areas east and west of airfield. Heliport on fld. Glider opr daily. Rwy 08 and Rwy 14 PAPI OTS indef. 0100–1700Z‡ ACTIVATE HIRL Rwy 08–26 and Rwy 14–32—CTAF. 1700–0100Z‡ HIRL Rwy 08–26 and Rwy 14–32 opr continuously.

WEATHER DATA SOURCES: AWOS–A 135.175 (775) 677–0589. Plus visibility.

COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ **RENO APP/DEP CON** 126.3

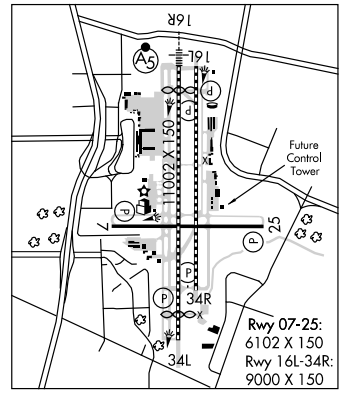
RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.

MUSTANG (H) VORTACW 117.9 FMG Chan 126 N39°31.88′ W119°39.37′ 293° 13.1 NM to fld. 5949/16E.

ILS/DME 111.9 I–RTS Chan 56 Rwy 32. Class I.

RENO/TAHOE INTL (RNO) 3 SE UTC−8(−7DT) N39°29.95′ W119°46.09′ **SAN FRANCISCO**
4415 B S4 **FUEL** 100LL, JET A1 + OX 1, 2, 3, 4 **H–3B, L–9A**
TPA—See Remarks LRA Class I, ARFF Index C NOTAM FILE RNO **IAP, AD**

RWY 16R–34L: H11002X150 (CONC–GRVD) S–75, D–185, ST–175, DT–350, DDT–850 PCN 88 R/B/W/T HIRL CL
RWY 16R: MALSR. PAPI(P4L)—GA 3.1° TCH 105′. Thld dsplcd 999′.
RWY 34L: PAPI(P4L)—GA 3.0° TCH 75′. Thld dsplcd 990′. Ground.
RWY 16L–34R: H9000X150 (CONC–GRVD) S–75, D–209, ST–175, DT–407, DDT–850 PCN 88 R/B/W/T HIRL CL
RWY 16L: REIL. PAPI (P4L)—GA 3.0° TCH 75′.
RWY 34R: REIL. PAPI(P4L)—GA 3.0° TCH 75′.
RWY 07–25: H6102X150 (CONC–GRVD) S–60, D–170, ST–175, DT–260 PCN 72 R/B/W/T MIRL
RWY 07: REIL. PAPI(P4L)—GA 3.2° TCH 48′. Pole.
RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 45′. Tree.
RUNWAY DECLARED DISTANCE INFORMATION
RWY 07: TORA–5854 TODA–5854 ASDA–6302 LDA–5854
RWY 25: TORA–6102 TODA–6102 ASDA–6302 LDA–6102



AIRPORT REMARKS: Attended continuously. **CAUTION:** Intensive glider activity invof arpt and surrounding areas up to 18.000′. Waterfowl all quadrants all seasons. Concentrated NW of Rwy 16R and E of Rwy 16L. Rwy 25 PAPI not to be used byd 2 NM due to rapidly rising mountainous terrain. Rwy 34L and Rwy 34R PAPI not to be used beyond 6 NM due to high terrain. Construction 1/4 mile east midpoint Rwy 16L, structure 193′ AGL. Twy A between N Twy B and Twy D closed to acft with wingspan greater than 149′. Twy C between Twy L and Twy D clsd to air carrier acft. Twy C between Twy L and Twy D restricted to acft 60,000 pounds or less. TPA—5215(800) single engine, 5415(1000) larger/high performance acft. Noise sensitive area all quadrants. All commercial acft ctc ground control for advisories prior to push back on the terminal ramp. Pilots of turbojet acft use recommended noise abatement procedures, avbl on request. Pilots of non–turbojet acft use best abatement procedures and settings. Avoid as much as feasible flying over populated areas. Pure jet touch and go low apch and practice instrument approaches are prohibited; acft over 12500 lbs require prior written approval for training flights; for further information ctc arpt ops 1–877–736–6359. 24 hours PPR for transient acft parking with wingspans greater than 75′. LRA PPR call 775–784–5585, no after hours ldg without prior arrangement. Glider/soaring ops 30–50 miles S of arpt during visual flight rule weather and mountain wave wind conditions 1900Z‡ to SS. For MIRL Rwy 07–25 0600–1330Z‡, HIRL Rwy 16L–34R and centerline lgts 0800–1330Z‡ ctc twr. Touchdown rwy visual range and rwy visibility value Rwy 16R. Flight Notification Service (ADCUS) avbl. NOTE: See Special Notices—Glider/Soaring Activities around the Reno–Tahoe Intl Arpt, Continuous Power Facilities.
WEATHER DATA SOURCES: ASOS (775) 324–6659.
COMMUNICATIONS: D-ATIS 135.8 (775) 348–1550 **UNICOM** 122.95
RENO RCO 122.2 122.5 (RENO RADIO)
Ⓡ **RENO APP CON** 126.3 (FMG 220°–035°) Rwy 16 119.2 (FMG 036°–255°) Rwy 34
Ⓡ **RENO DEP CON** 126.3 (FMG 256°–035°) Rwy 34 119.2 (FMG 036°–219°) Rwy 16
RENO TOWER 118.7 **GND CON** 121.9 **CLNC DEL** 124.9
AIRSPACE: CLASS C svc continuous ctc **APP CON**
RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.
MUSTANG (H) VORTACW 117.9 FMG Chan 126 N39°31.88′ W119°39.37′ 234° 5.5 NM to fld. 5949/16E.
ILS/DME 109.9 I–AGY Chan 36 Rwy 34L. Class IE. LOC front course unusable inside DUYEP (3.6 NM) above 8,500′ MSL at thld abv 6,400′ MSL.
ILS/DME 110.9 I–RNO Chan 46 Rwy 16R. Class ID. LOC backcourse unusable byd 20° left of course.

SPANISH SPRINGS (N86) 7 N UTC−8(−7DT) N39°39.99′ W119°43.39′ **SAN FRANCISCO**
4600 **FUEL** 100LL NOTAM FILE RNO
RWY 16–34: 3540X71 (DIRT) RWY LGTS(NSTD)
RWY 16: Building. **RWY 34:** Rgt tfc.
AIRPORT REMARKS: Unattended. Rwy 16–34 hazardous when wet. Ultralight activity on and invof arpt. No line of site between ends of rwy. Mountains West and North. Uncontrolled vehicle access across rwys. Rwy 16 gradient 2.5% up first 500′. Rwy 16 thresholds marked with 4 white cement pads flush to the ground. Rwy edge marked with reflectors.
COMMUNICATIONS: CTAF 122.9

ROSASCHI AIR PARK (See SMITH)

SANDY VALLEY

SKY RANCH (3L2) 2 SW UTC−8(−7DT) N35°47.72′ W115°37.63′ **LAS VEGAS**
2599 **FUEL** 100LL NOTAM FILE RNO **L–7D**
RWY 03–21: H3340X45 (ASPH) RWY LGTS (NSTD)
RWY 03: Rgt tfc. **RWY 21:** Thld dsplcd 180′. Road.
RWY 12–30: 3300X105 (DIRT) **RWY 12:** Rgt tfc.
AIRPORT REMARKS: Attended irregularly. Low flying military acft in area. Ultralight activity on and invof arpt. Occasional livestock on and in vicinity of acft movement areas. Rwy 03–21 obstacle free area limited to 96′ either side of centerline. Rwy 12 first 1000′ soft sand spots. Power poles, lines northwest, southeast of taxiway. Power poles/lines NW/SE of Rwy 03–21. No line of sight between rwy ends. Arpt is a residential airpark, auto traffic is on and across rwy. Avoid noise sensitive residential area 1.5 miles NW of arpt. Rwy 21 dsplcd thld marked with 8′ white lines. Rwy 03–21 thld lgts only. Rwy edges marked with reflectors. Rwy 12–30 thld not marked.
COMMUNICATIONS: CTAF/UNICOM 123.0
RADIO AIDS TO NAVIGATION: NOTAM FILE LAS.
LAS VEGAS (H) VORTACW 116.9 LAS Chan 116 N36°04.78′ W115° 09.59′ 218° 28.4 NM to fld. 2141/15E.

SEARCHLIGHT (1L3) 2 S UTC−8(−7DT) N35°26.67′ W114°54.57′ **PHOENIX**
3410 NOTAM FILE RNO **H–4I, L–7E**
RWY 16–34: H5040X70 (ASPH)
RWY 16: Fence.
AIRPORT REMARKS: Unattended. Ground rises at constant rate north of arpt for approximately 2 miles. Unlighted 165′ p–line located approximately 3.2 miles south of rwy blo thld. Rwy 16–34 thlds marked with 6 green reflectors.
COMMUNICATIONS: CTAF 122.9
RADIO AIDS TO NAVIGATION: NOTAM FILE RAL.
GOFFS (L) VORTAC 114.4 GFS Chan 91 N35°07.87′ W115°10.59′ 020° 22.9 NM to fld. 4000/15E.

SILVER SPRINGS (SPZ) 2 SW UTC−8(−7DT) N39°24.18′ W119°15.07′ **SAN FRANCISCO**
4269 NOTAM FILE RNO **H–3B, L–9A**
RWY 05–23: H5998X75 (ASPH–GRVD) S–30 MIRL
RWY 23: Rgt tfc.
AIRPORT REMARKS: Unattended. Ultralight activity on and invof arpt. ACTIVATE MIRL Rwy 05–23—CTAF.
WEATHER DATA SOURCES: AWOS–3 122.9 (617) 262–3825.
COMMUNICATIONS: CTAF 122.9
RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.
HAZEN (L) VORTAC 114.1 HZN Chan 88 N39°30.99′ W118° 59.86′ 223° 13.6 NM to fld. 4080/17E.

SKY RANCH ESTATES (See SANDY VALLEY)

SMITH

ROSASCHI AIR PARK (N59) 2 N UTC−8(−7DT) N38°50.36′ W119°20.29′ **SAN FRANCISCO**
4809 **FUEL** 100LL NOTAM FILE RNO **L–9A**
RWY 07–25: H4800X32 (ASPH)
RWY 17–35: 3700X64 (DIRT)
RWY 35: Building.
AIRPORT REMARKS: Unattended. For fuel 24 hr prior notice required call 775–465–2417. Numerous severe cracks entire length of Rwy 07–25.
COMMUNICATIONS: CTAF 122.9
RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.
HAZEN (L) VORTAC 114.1 HZN Chan 88 N39°30.99′ W118°59.86′ 184° 43.6 NM to fld. 4080/17E.

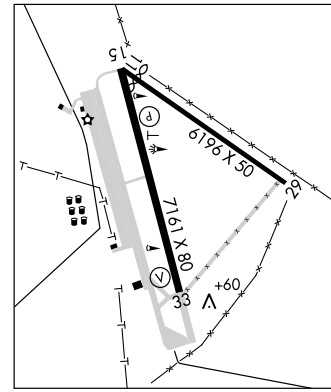
SOD HOUSE N41°24.42′ W118°02.08′ NOTAM FILE RNO. **KLAMATH FALLS**
(L) VORTACW 114.3 SDO Chan 90 143° 32.3 NM to Winnemucca Muni. 4161/18E. **L–11B**
VORTAC unusable:
030°–160° byd 20 NM below 15,000′ 300°–345° byd 20 NM below 13,000′
220°–245° byd 20 NM below 15,000′
RCO 122.6 (RENO RADIO)

SPANISH SPRINGS (See RENO)

STEVENS–CROSBY (See NORTH FORK)

TIGER FLD (See FERNLEY)

TONOPAH (TPH) 7 E UTC−8(−7DT) N38°03.61′ W117°05.21′ **LAS VEGAS**
5430 B S4 **FUEL** 100LL, JET A OX 4 NOTAM FILE TPH **H–3C, L–9B**
RWY 15–33: H7161X80 (ASPH) S–30 MIRL 0.5% up NW **IAP, AD**
RWY 15: PAPI(P2L)—GA 3.0° TCH 40′.
RWY 33: VASI(V4L)—GA 3.0° TCH 31′.
RWY 11–29: H6196X50 (ASPH) S–30, D–66, ST–84, DT–77
0.3% up NW
RWY 11: Thld dsplcd 538′.
AIRPORT REMARKS: Attended 1400–0700Z‡. Fuel avbl 1500–0200Z‡ after hours on request call 775–482–3626. Parachute Jumping. Rwy 15 PAPI out of svc indefinitely. ACTIVATE MIRL Rwy 15–33—CTAF. NOTE: See Special Notices—FAR–PART 139 Certificated Airports.
WEATHER DATA SOURCES: ASOS 118.875. (775) 482–3441.
COMMUNICATIONS: CTAF/UNICOM 123.0
RCO 122.6 (RENO RADIO)
Ⓡ **SALT LAKE CENTER APP/DEP CON** 133.45
RADIO AIDS TO NAVIGATION: NOTAM FILE TPH.
(L) VORTACW 117.2 TPH Chan 119 N38°01.84′ W117°02.01′ 288° 3.1 NM to fld. 5344/17E.
VORTAC unusable:
360°–015° beyond 30 NM below 10,800′
015°–050° beyond 35 NM below 10,800′
050°–060° beyond 30 NM below 9500′
240°–260° beyond 30 NM below 10,600′
270°–315° beyond 20 NM below 8600′



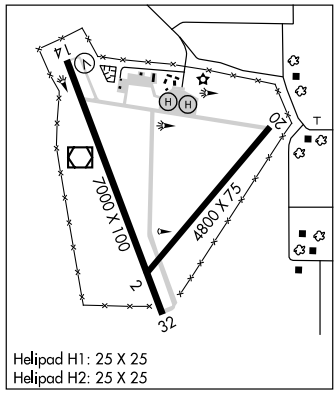
TRUCKEE–TAHOE (See TRUCKEE–TAHOE, CA)

VAN VOORHIS FLD (See FALLON NAS)

WELLS MUNI/HARRIET FLD (LWL) 2 NE UTC−8(−7DT) N41°07.03′ W114°55.33′ **SALT LAKE CITY**
5772 B **FUEL** 100LL NOTAM FILE RNO **H–3C, L–11C**
RWY 08–26: H5498X150 (ASPH) S–25 MIRL
RWY 08: Rgt tfc.
RWY 01–19: 2681X150 (GRVL–DIRT)
RWY 01: Rgt tfc. Building. **RWY 19:** Hill.
AIRPORT REMARKS: Attended Mon–Fri 1600–0100Z‡. After hours call 775–752–3946. Ultralight activity on and invof arpt. Mountains N and S quadrants. Rwy 08–26 center 75′ stressed for 25,000 pounds single wheel, remainder of 150′ width is 11,500 pounds single wheel. Rwy 01–19 marked with +2 ft red/white panels 75 ft outside shoulder. Rwy 01–19 vegetation +1′ full length. Snow removal svcs during dalgt only except by prior arrangement call 775–777–7300. ACTIVATE MIRL Rwy 08–26—122.8.
COMMUNICATIONS: CTAF/UNICOM 122.8
WELLS RCO 122.1R 114.2T (RENO RADIO)
RADIO AIDS TO NAVIGATION: NOTAM FILE EKO.
BULLION (L) VORW/DME 114.5 BQU Chan 92 N40°45.58′ W115°45.68′ 043° 43.8 NM to fld. 6463/17E.
(L) VOR 114.2 LWL N41°08.69′ W114°58.65′ 106° 3.0 NM to fld. NOTAM FILE RNO.
VOR unusable:
060°–070° beyond 20 NM below 12,000′.
115°–125° beyond 20 NM below 13,000′.
180°–215° beyond 10 NM.
330°–350° beyond 15 NM below 13,000′.
350°–040° beyond 25 NM below 12,000′.

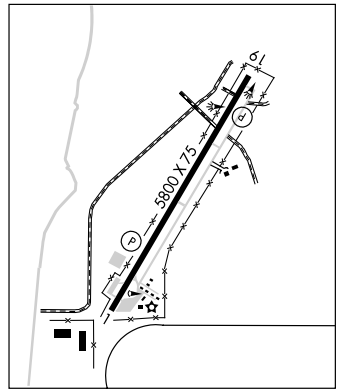
WILSON CREEK N38°15.01′ W114°23.66′ NOTAM FILE RNO. **LAS VEGAS**
(H) VORTAC 116.3 ILC Chan 110 167° 27.8 NM to Lincoln Co. 9318/16E. **H–3C, L–9B**
RCO 122.1R 116.3T (RENO RADIO)

WINNEMUCCA MUNI (WMC) 5 SW UTC−8(−7DT) N40°53.80′ W117°48.35′ **KLAMATH FALLS**
4308 B S4 **FUEL** 100LL, JET A TPA—5108(800) NOTAM FILE WMC **H–3B, L–11B**
RWY 14–32: H7000X100 (ASPH) S–75, D–125, ST–159, DT–200 MIRL **IAP**
RWY 14: VASI(V2L)—GA 3.0° TCH 40′. P–line.
RWY 02–20: H4800X75 (ASPH) S–28 MIRL
RWY 20: Road.
AIRPORT REMARKS: Attended Nov–May 1500–0100Z‡ Jun–Oct 1500–0200Z‡. After hours on call at 775–304–1350. Mountains in SW quadrant. Full strength pavement areas include N 1000′ of parallel twy (Rwy 14–32 to Twy A), W 1000′ of Twy A, 600′ of N/S twy (from Twy A). MIRL Rwy 14–32 preset low ints, to increase ints ACTIVATE—CTAF.
WEATHER DATA SOURCES: ASOS 120.175 (775) 625–2200.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.3 (RENO RADIO)
SALT LAKE CENTER APP/DEP CON 132.25
RADIO AIDS TO NAVIGATION: NOTAM FILE WMC.
(T) VORW/DME 108.2 INA Chan 19 N40°53.96′ W117°48.73′ at fld. 4302/16E.
VOR/DME unusable:
050°–110° beyond 15 NM below 11,300′
110°–130° beyond 20 NM below 10,800′
150°–190° beyond 15 NM below 10,200′
190°–210° beyond 20 NM below 11,800′



HELIPAD H1: H25X25 (CONC)
HELIPAD H2: H25X25 (CONC)

YERINGTON MUNI (O43) 1 N UTC−8(−7DT) N39°00.25′ W119°09.48′ **SAN FRANCISCO**
4378 B S4 **FUEL** 100LL TPA—5178(800) NOTAM FILE RNO **H–3B, L–9A**
RWY 01–19: H5800X75 (ASPH) S–24, D–32 MIRL
RWY 01: PAPI(P2L)—GA 3.0° TCH 40′.
RWY 19: REIL. PAPI(P2L)—GA 3.0° TCH 40 ′. Trees.
AIRPORT REMARKS: Attended Mon–Fri 1500–0200Z‡, Sat–Sun irregularly. Rwy 19 REIL OTS indef. ACTIVATE MIRL Rwy 01–19—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8
RADIO AIDS TO NAVIGATION: NOTAM FILE RNO.
HAZEN (L) VORTAC 114.1 HZN Chan 88 N39°30.99′ W118°59.86′ 177° 31.6 NM to fld. 4080/17E.



2010 U.S. & CANADIAN MILITARY AERIAL AIRCRAFT/PARACHUTE DEMONSTRATIONS

During CY 2010, the U.S. and Canadian Military Aerial Demonstration Teams (Thunderbirds, Blue Angels, Snowbirds, and Golden Knights) will be performing on the dates and locations listed below.

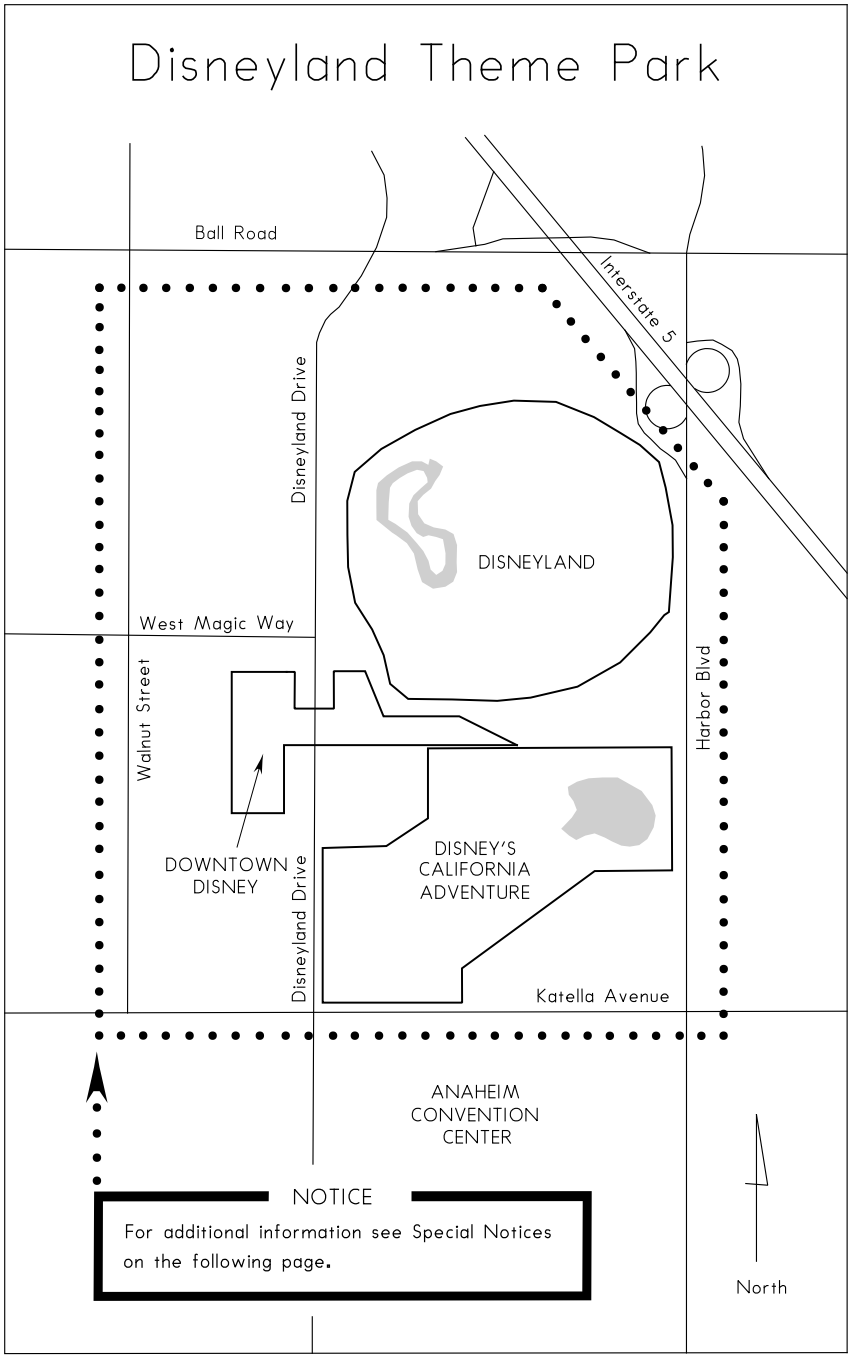
Pilots should expect Temporary Flight Restrictions (TFR) in accordance with 14 CFR Section 91.145, Management of aircraft operations in the vicinity of aerial demonstrations and major sporting events. The dimensions and effective times of the TFRs may vary based upon the specific aerial demonstration event and will be issued via the U.S. NOTAM system. Pilots are strongly encouraged to check FDC NOTAMs to verify they have the most current information regarding these airspace restrictions.

The currently scheduled 2010 aerial demonstration locations, subject to change without notice, are:

DATE:		USAF Thunderbirds	USN Blue Angels	USA Golden Knights	Canadian Snowbirds
April	10-11	Eglin AFB, FL			
	11		NAS Key West, FL		
	17		Charleston AFB, SC		
	17-18	Lakeland, FL			
	24-25	Barksdale AFB, LA	Vidalia, GA	Ft. Lauderdale, FL	
	24-25			Galena, FL	
May	1	Dyess AFB, TX			
	2	Altus AFB, OK			
	1-2		St. Joseph, MO		
	8-9	Shaw AFB, SC	Tuscaloosa, AL	Shaw AFB, SC	Niagara Falls, NY
	8-9			Tuscaloosa, AL	
	13			Union, NJ	
	15-16	Columbus AFB, MS	Andrews AFB, MD	Columbus AFB, MS	
	15-16			Andrews AFB, MD	
	22	Grand Forks AFB, ND			
	22-23		MCAS Cherry Point, NC		
	26	Colorado Springs, CO	Annapolis, MD		
	29-30	Janesville, WI	Jones Beach, NY	Jones Beach, NY	
	29-30			Janesville, WI	
June	5-6	Ocean City, MD	Eau Claire, WI	Eau Claire, WI	
	5-6			Florence, SC	
	12-13		Milwaukee, WI	Milwaukee, WI	
	19-20	Tinker AFB, OK	Cape Girardeau, MO	Cape Girardeau, MO	
	19-20			Gaylord, MI	
	26-27	North Kingstown, RI	St. Cloud, MN	Findlay, OK	
July	3			Madison, WI	
	3			Dubuque, IA	
	3-4		Traverse City, MI		
	4			Ft Bragg, NC	
	10		Pensacola Beach, FL		
	10-11	Gary, IN		Gary, IN	
	17-18	Duluth, MN	Dayton, OH		
	24-25	Fairchild AFB, WA	Idaho Falls, ID		
	28	Cheyenne, WY			
	29			Goshen, IN	
	29			Ft AP Hill, VA	
	31	Rockford, IL	Anchorage, AK	Rockford, IL	Elmendorf AFB, AK
	31			Johnstown, PA	

DATE:		USAF Thunderbirds	USN Blue Angels	USA Golden Knights	Canadian Snowbirds
August	1	Rockford, IL	Anchorage, AK	Rockford, IL	Elmendorf AFB, AK
	1			Johnstown, PA	
	7-8	TBD	Seattle, WA		
	14-15		Chicago, IL	Chicago, IL	
	21-22	Westfield, MA		Westfield, MA	
	21-22			Kansas City, MO	
	25			Atlantic City, NJ	
	26			Ft Monroe, VA	
	28-29	Coney Island (Brooklyn), NY	Portsmouth, NH	Coney Island (Brooklyn), NY	
	28-29			Portsmouth, NH	
September	4-5	Martinsburg, WV		Cleveland, OH	
	4-5			Martinsburg, WV	
	4-6		Cleveland, OH		
	11-12	Corapolis (Pittsburgh), PA	Scott AFB, IL	Corapolis (Pittsburgh), PA	
	11-12			Scott AFB, IL	
	18-19	Whiteman AFB, MO	NAS Oceana, VA	Whiteman AFB, MO	Reno, NV
	25-26	McConnell AFB, KS	MCAS Kaneohe Bay, HI		
October	1-3		MCAS Miramar, CA		MCAS Miramar, CA
	2-3	Salinas, CA		MCAS Miramar, CA	
	2-3			Jackson, MS	
	9-10	Little Rock AFB, AR	San Francisco, CA	Little Rock, AFB, AR	Daytona Beach, FL
	16-17	El Paso, IX	Dobbins AFB, GA	El Paso, TX	Atlanta, GA
	23-24	Houston, TX	NAS Jacksonville, FL	Washington, DC	
	30-31	Cocoa Beach, FL	Ft Worth Alliance, TX	Ft Worth Alliance, TX	
November	6-7	Lackland AFB, TX	Homestead ARB, FL	Lackland AFB, TX	
	6-7			Homestead ARB, FL	
	11-14			Ft Bragg, NC	
	12-13		NAS Pensacola, FL		
	13-14	Nellis AFB, NV			

Note: Dates and locations are scheduled ''show dates'' only and do not reflect arrival or practice date TFR periods that may precede the specific aerial demonstration events listed above. Again, pilots are strongly encouraged to check FDC NOTAMs to verify they have the most current information regarding any airspace restrictions.


Disneyland Theme Park
Ball Road
Interstate 5
Disneyland Drive
DISNEYLAND
West Magic Way
Walnut Street
Harbor Blvd
DOWNTOWN DISNEY
DISNEY'S CALIFORNIA ADVENTURE
Disneyland Drive
Katella Avenue
ANAHEIM CONVENTION CENTER
NOTICE
For additional information see Special Notices on the following page.
North

DISNEYLAND THEME PARK

NOTICE

Pursuant to Public Law 108–199, Section 521, aircraft flight operations are prohibited at and below 3,000 feet AGL within a 3 nautical mile radius of the Disneyland Theme Park (334805N/1175517W or the Seal Beach (SLI) VORTAC 066 degree radial at 6.8 nautical miles). This restriction does not apply to: (A) those aircraft authorized by ATC for operational or safety purposes, including aircraft arriving or departing from an airport using standard air traffic procedures; (B) Department of Defense, law enforcement, or aeromedical flight operations that are in contact with ATC; Those who meet any of the following criteria may apply for a waiver to these restrictions: (A) for operational purposes of the venue, including the transportation of equipment or officials of the governing body; (b) for safety and security purposes of the venue.

LIGHTS–OUT OPERATIONS
Desert/Reveille MOAs, Nevada and Utah

Lights–out night vision goggle flight training operations conducted within the Desert and Reveille North/South Military Operations Areas (MOAs) at all altitudes, Monday through Friday between sunset and sunrise when the MOAs are active. Traffic advisories are available from the Nellis ATC Facility (Nellis Control) on 126.65 or 124.95.

LIGHTS–OUT OPERATIONS
Lucin/Seveir/Gandy MOAs, Utah

Lights–out night vision goggle flight training operations conducted within the Lucin, Seveir, and Gandy Military Operations Areas (MOAs) at all altitudes, Monday through Friday between sunset and sunrise when the MOAs are active. Traffic advisories are available from the Clover ATC Facility (Clover Control) on 118.45 or 134.1.

INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS
SAN FRANCISCO INTERNATIONAL AIRPORT (SFO)
SAN FRANCISCO, CALIFORNIA

San Francisco International Airport Traffic Control Tower has been granted a waiver to the guideline that prohibits the control tower from taxiing an aircraft into ''position and hold'' at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi the aircraft into ''position and hold'' during period of darkness, at the intersections listed below.

Runway 1R at Taxiway Mike
Runway 10L at Taxiways Romeo or Uniform
Runway 10R at Taxiway Uniform

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise. However, aircraft cannot be taxied into ''position and hold'' prior to takeoff clearance.

INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS
LAS VEGAS–MCCARRAN INTERNATIONAL AIRPORT (LAS)
LAS VEGAS, NEVADA

Las Vegas–McCarran International Airport Traffic Control Tower has been granted a waiver to the guideline that prohibits the control tower from taxiing an aircraft into ''position and hold'' at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi the aircraft into ''position and hold'' during period of darkness, at the intersections listed below.

Runway 07L at Taxiways ''A8'' or Delta

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runway shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise. However, aircraft cannot be taxied into ''position and hold'' prior to takeoff clearance.

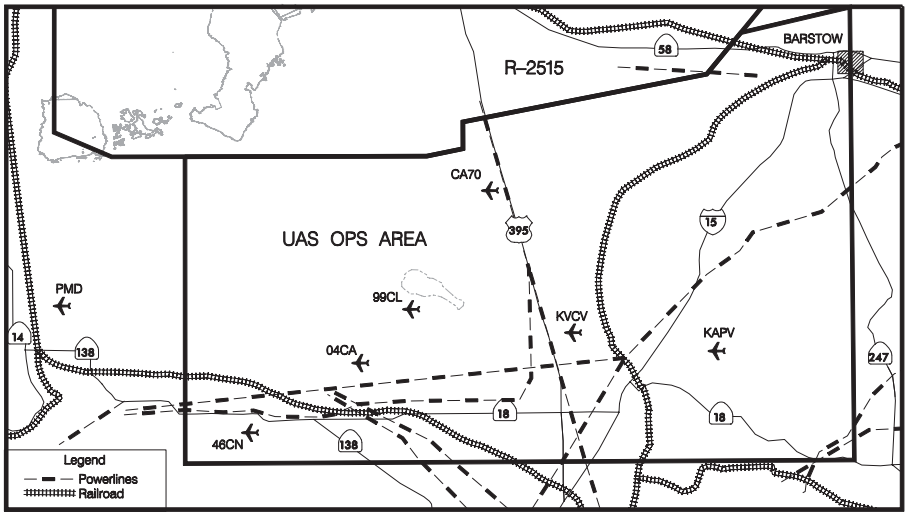
LOS ANGELES, CA, LOS ANGELES INTERNATIONAL AIRPORT (LAX)
NOISE ABATEMENT PROCEDURES

Successive or simultaneous departures from Runways 24L/R and Runways 25L/R are authorized, with course divergence beginning within 2 miles from the departure end of parallel runways, due to noise abatement restrictions.

UNMANNED AIRCRAFT SYSTEMS (UAS) OPERATIONS IN SOUTHERN CALIFORNIA

UAS operations are conducted sunrise to sunset within three (3) nautical miles of El Mirage Field Adelanto (N34°37′30″, W117°36′20″) and Grey Butte (N34°33′55″, W117°40′50″) at or below 6,000 feet MSL. From sunset to sunrise operations may be conducted within four (4) nautical miles at and below 4,000 feet AGL. Contact Joshua control on 124.55 or 363.0 for activity information and advisory service.

UAS operations may be conducted in accordance with Visual Flight Rules (VFR) accompanied by a chase aircraft below 14,000 feet MSL in an area bounded by N34°58′00″ W117°00′00″, N34°27′00″ W117°00′00″, N34°27′00″ W117°55′00″, N34°48′00″ W117°55′00″, N34°48′00″ W117°35′03″, N34°48′30″ W117°32′03″, N34°50′20″ W117°32′03″, N34°53′30′ W117°11′53″, N34°56′20″ W117°09′03″ thence to point of beginning.



UNMANNED AIRCRAFT SYSTEMS (UAS) OPERATIONS IN NORTHERN NEVADA

UAS operations are continuously conducted within the Fallon Approach Control Airspace and the Fallon Range Training Complex at all altitudes when the Special Use Airspace areas are active. Contact Desert Control on 126.2 MHz. for activity status.

UNMANNED AIRCRAFT SYSTEMS (UAS) OPERATIONS IN NEVADA AND UTAH

There is continuously unmanned aircraft systems flight activity conducted within the desert and reveille military operations areas (MOAs) at all altitudes when the MOAs are active. Traffic advisories are available from the Nellis Air Traffic Control facility (Neillis Control) on 126.65.

MODEL AIRCRAFT ACTIVITY—EL TORO, CALIFORNIA

Model aircraft activity conducted 500′ AGL and below, 0.5 NM radius of apch end of Rwy 25L. CLOSED MCAS El Toro, daily 1500–0400Z‡. For NOTAM information contact Prescott AFSS on 800–992–7433.

DENVER TERMINAL RADAR APPROACH CONTROL
Denver, Colorado

The Denver Terminal Radar Approach Control has been issued a waiver which enables controllers to assign speed restrictions without obtaining pilot concurrences; e.g., speeds of less than 250 knots below FL280 and speeds of less than 210 knots when the aircraft is greater than 20 flying miles from the threshold of the airport of intended landing.

EXTENSIVE HELICOPTER FLIGHT TRAINING IN THE VICINITY OF ROCKY MOUNTAIN METROPOLITAN AIRPORT (BJC), BROOMFIELD, COLORADO

Frequent usage of Runway 11R–29L, Taxiway D, and the north end of Runway 20 by helicopter flight schools. Pilots are cautioned to listen carefully to ATC for turnoff instructions when landing on Runway 11R–29L. Helicopters flight schools use three primary local procedures: Charlie Two, Ball, and Erie. CHARLIE TWO; Expect departures to the south thence turning to the northwest. Expect arrivals from the northwest. BALL; Expect departures to the south thence turning east. Expect arrivals from the east. ERIE; Expect departures northbound. Expect arrivals from the north.

INTENSE HELICOPTER OPERATIONS
LOS ANGELES BASIN AREA, CALIFORNIA

CAUTION: Intense helicopter operation below 2000′AGL. All pilots transitioning the area at or below 2000′AGL are encouraged to make regular position reports on frequency 123.025.

LASER LIGHT DEMONSTRATIONS

Anaheim, California

A laser light demonstration will be conducted nightly between sundown and midnight at Disneyland, Anaheim, California (SLI VORTAC 060 radial at 7NM LAT 33°48′40″N/LON 117°55′00″W). The beam may be injurious to eyes if viewed within 300 feet vertically and 600 feet laterally of the light sources. Cockpit illumination–flash blindness may occur beyond these distances.

Knotts Berry Farm
Buena Park, California

A permanent laser light demonstration is being conducted at Knotts Berry Farm, 33°49′45″N/117°59′35″W, Seal Beach Vortac SLI 022/005, 0445 to 0600 UTC DLY. Laser light beam may be injurious to pilots/passengers eyes within 800 feet vertically and 1400 feet laterally of the light source. Flash blindness or cockpit illumination may occur beyond these distances.

Long Beach, California

A laser light demonstration will be conducted nightly between sundown and 11 PM at the Pine Avenue Theater Complex, Pine Avenue, Long Beach, California (SLI VORTAC 250 radial at 8NM LAT 33°46′12″N/LON 118°11′30″W). The beam may be injurious to eyes if viewed within 100 feet vertically and 1,900 feet laterally of the light source. Cockpit illumination–flash blindness may occur beyond these distances.

Palomar Observatory

A laser light operation is conducted intermittently between sunset and sunrise at the Palomar Observatory N33–21–22/W 116–51–53, Julian VOR (JLI) 298 degree radial at 19 nautical miles. The laser beam may be injurious to eyes if viewed on axis. Cockpit illumination and flash blindness may also occur if the beam enters the cockpit. Los Angeles ARTCC, (661) 265–8205 is the FAA coordination facility.

San Francisco, California

A Laser Light Demonstration will be conducted nightly between 8:30 pm and 2:00 am at Pier 39, San Francisco, California (SAU VORTAC 100 radial at 12 NM LAT 37°48′40″ N; LON 122°24′35″ W). The beam may be injurious to Pilots/Passengers' eyes if viewed within 800 feet vertically and 800 feet laterally of the light source. Cockpit illumination–flash blindness may occur beyond these distances.

CHRISTMAN AIRPORT, FORT COLLINS, COLORADO

A laser light operation for testing and alignment is being conducted at Christman Airport, 40°35′24″N/105°08′26″W, GLL VORTAC 270/28NM. This testing is ongoing, intermittently, 24 hours per day 7 days a week. Laser light beams may be injurious to pilot's/passenger's eyes within 4479 feet of the light source, to 8958 feet AGL. The secondary effects of flash blindness or cockpit illumination may occur beyond these distances. Denver TRACON, 303–342–1590 is the FAA coordination facility.

CONTROLLED FIRING AREA (CFA) EAST OF YUMA, AZ

The military has established a controlled firing area (CFA) east of Yuma, AZ. The CFA is bordered by the following fixes: BZA058015 - BZA068035 - BZA072034 - BZA075030 - BZA075015 - BZA058015. Operations will be conducted at or below 3000′AGL. The hours of operation are Monday through Saturday from sunrise to sunset.

SAN DIEGO, CALIFORNIA SOUTHBOUND INTERNATIONAL BORDER CROSSING

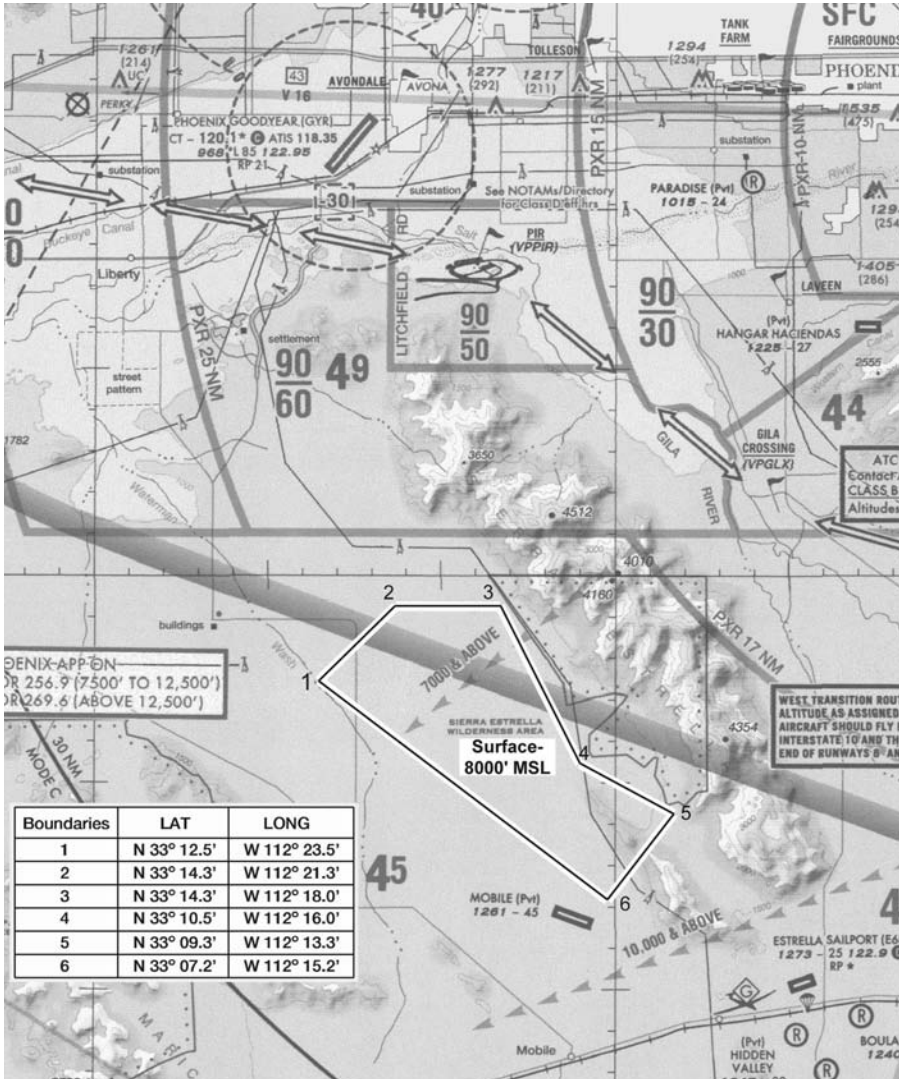
Pilots crossing the International border southbound into Mexican airspace, in the vicinity of San Diego, are encouraged to cross Tijuana International Airport at midfield to avoid arriving and departing aircraft. Pilots requesting transition through the Brown Field CLASS D airspace should contact Brown Tower on frequency 126.5. All others should contact Tijuana Approach Control on frequency 119.5 prior to crossing the border. Southbound aircraft are requested to squawk 1260 prior to crossing the border unless otherwise advised by ATC.

EXTENSIVE PARACHUTE DROP ACTIVITIES
SAN DIEGO, CALIFORNIA

Use caution when transiting the corridor south of San Diego Class B airspace and north of the international border between the coast and east to the Tecate area. A wide variety of civilian and military aircraft types (Cessna 182–C–130) use this corridor to make high rates of ascent and descent from the surface to 15000 MSL. Note the San Diego, Trident, and Otay Reservoir jumping areas located in this corridor and to the northeast of Brown Field Municipal Airport. Use VHF 121.95 to monitor parachute drop activities.

AEROBATIC OPERATIONS SOUTHEAST OF PHOENIX GOODYEAR AIRPORT, GOODYEAR, ARIZONA

The aerobatic training area center point is located on the Stanfield VOR 300° radial at 26.5 DME. The area exists approximately 2 nautical miles on each side of the TFD VOR 300° radial from 22 to 31 DME, surface to 8000′ MSL. Pilots should use caution in this area. Frequency 128.92 is provided for air-to-air communications with pilots using or transiting the area. For information regarding hours of operation, contact 623–932–1650.



Boundaries	LAT	LONG
1	N 33° 12.5'	W 112° 23.5'
2	N 33° 14.3'	W 112° 21.3'
3	N 33° 14.3'	W 112° 18.0'
4	N 33° 10.5'	W 112° 16.0'
5	N 33° 09.3'	W 112° 13.3'
6	N 33° 07.2'	W 112° 15.2'

AEROBATIC PRACTICE AREA
MOUNTAIN VALLEY AIRPORT, TEHACHAPI, CALIFORNIA

Practice and competitive aerobatic maneuvers regularly scheduled adjacent to south side of Mountain Valley Airport (3 NM long X ½ NM wide), surface to 5000′ AGL. The practice area is for waiver holders only. Pilots should use caution when operating within this area. For further information contact VAN NUYS FSDO on 1–818–904–6291.

Restricted Area R–2305
Gila Bend, Arizona
Transit Information

A transit route extends from Gila Bend to the Eric Marcus Airport over Arizona Highway 85 at 500 feet above ground level (AGL). VFR rules govern civilian flight through the Goldwater Air Force Range. Airevac flights will be given priority over all other air traffic other than inflight emergencies. The Airevac call sign will be used only when the aircraft is on an actual air evacuation mission. Department of Public Safety (DPS) ''Ranger'' call signs must indicate they are on an Airevac mission to receive priority. Military aircraft will have priority over all remaining aircraft. Aircraft requesting to transition this airspace may encounter delays.

General aviation aircraft must coordinate their route of flight, departure, and return times with Range Operations prior to departure. Phone (623) 856–8818/8819. Once airborne, aircraft from the north contact Gila Bend AFAF Tower (primary) on 257.65/127.75 (UHF/VHF) or Range Operations (secondary) on 264.125/122.775. Aircraft from the south contact Range Operations 264.125/122.775. Aircraft must hold outside restricted airspace until clearance is granted to transit the area. After receiving clearance into the Restricted Airspace, pilots shall monitor Range Operations frequency.

The preferred VFR procedure will be to fly over Highway 85 at 500 feet AGL, monitoring Range Ops on VHF 122.775. At night aircraft will fly over Highway 85 at or below 1000 feet AGL. Military aircraft on manned ranges will be instructed to remain clear of Highway 85 or to transit the highway 500 feet above altitude of transiting aircraft.

Caution: Due to repeater transmissions and mountainous terrain, flights north of the Sauceda Mountains (Black Gap) will normally only be able to contact Gila Bend Tower. Flights south of the mountains should contact Range Operations. Military aircraft on the Range may be operating lights out.

The normal hours of the Goldwater Air Force Range are from 0630–2400 local Monday through Saturday. When the range is not active, Gila Bend AFAF Tower and Range Operations are closed. If unable to contact the Tower or Range Operations, contact Albuquerque ARTCC on 126.45 or 125.25 for clearance.

LOW ALTITUDE TACTICAL NAVIGATION AREA (LATN) EAST OF TUCSON, AZ

The military has established a Low Altitude Tactical Navigation Area (LATN) east of Tucson bordered by the following fixes: TUS037017–TUS025022–TUS038037–CIE323030–CIE294015–CIE255022–TUS090028–TUS055029–TUS037017. The LATN is not a restricted area and will continue to be available for use by civilian aircraft in accordance with FAA rules and regulations. The primary operations will be conducted by HH–3/MH–60 helicopters from 100 ft AGL to 600 ft AGL. The hours of operations will be daily from 1500–0100Z

ORANGE COUNTY GREAT PARK TETHERED BALLON
IRVINE, CALIFORNIA

(Until Further Notice)

Tethered balloon 780′ MSL daily (1700–0600Z‡), Located on the El Toro VOR/DME 234 radial at 1 mile (ELB234001).

SEA WORLD TETHERED BALLOON
SAN DIEGO, CALIFORNIA

(Until Further Notice)

Tethered balloon 367′ MSL daily (1700–0400), Located on the Mission Bay VORTAC 180 radial at 1 mile (MZB180001).

UNAUTHORIZED TRANSMISSION ARIZONA, CALIFORNIA, AND NEVADA AREA

(Until Further Notice)

Attention all aircraft: Be alert to the possibility of UNAUTHORIZED AIR TRAFFIC CLEARANCES issued on ATC frequencies in the Arizona, California, and Nevada areas. If you received a transmission that is questionable verify with AIR TRAFFIC CONTROL.

SAN FRANCISCO INTERNATIONAL AIRPORT EXPANDED CHARTED VISUAL FLIGHT PROCEDURES

(Until Further Notice)

GENERAL

San Francisco International Airport (SFO) is subject to stratus moving slowly from West to East, creating a reportable weather ceiling over the airport, while the final approach area for Runways 28R and 28L have no significant ceiling or visibility conditions. And expanded charted visual flight procedure (E/CVFP) has been developed to maximize the level of airport efficiency during the unusual weather conditions described above.

MINIMUMS

The E/CVFP incorporates the following weather minimums:

SFO ceiling 2100 feet and visibility 5 miles; or,

SFO ceiling 1000 feet and visibility 3 miles, and,

visibility 5 miles in the Eastern quadrant (030–120), and,

ceiling 2400 and visibility 5 miles at the automated weather observing system (AWOS) located at BRIJJ

LOM. In the event the AWOS is inoperative, weather at San Carlos (SQL) is required to be at least ceiling 2400 feet and visibility 5 miles.

Although the listed weather minima are in effect aircraft should not expect simultaneous E/CVFP approaches unless BRIJJ AWOS ceiling is at least 3500 feet and visibility is at least 5 miles.

SPACING AND SEQUENCING

Controllers will clear aircraft for the E/CVFP in accordance with the provisions of Order 7110.65, Air Traffic Control. They will not utilize phrases requesting or requiring aircraft to ''fly right alongside'', ''wingtip to wingtip'', or ''directly abeam'' other aircraft. Additionally, controllers will not assign instructions or require aircraft to pass and/or overtake other aircraft on the adjacent final approach course. Preferably, aircraft will be vectored to achieve a slightly staggered position of approximately ⅛ to ¼ mile behind the aircraft on the adjacent final approach course. Heavy aircraft and B757's will not be authorized to overtake another aircraft on the adjacent final approach course. Wake turbulence cautionary advisories will be issued, as appropriate.

GO-AROUND PROCEDURE

The Tipp Toe and Quiet Bridge approaches are visual approaches, and as such have no missed approach segment. If a go-around is necessary, aircraft will be issued an appropriate advisory/clearance/instruction by the tower or tracon. To ensure standard separation from other traffic, these instructions will include the assignment of a specific heading and altitude, Normally, the following procedures will apply:

Tipp Toe Visual Runway 28L

In the event of a go-around turn left heading 265, climb and maintain 3000; or as directed by Air Traffic Control.

Quiet Bridge Visual Runway 28R

In the event of a go-around turn right heading 310, climb and maintain 3000; or as directed by Air Traffic Control.

AEROBATIC OPERATIONS IN ARIZONA

The following practice and competitive aerobatic areas are in use without notice SR–SS daily.

5 NMR DMA	17,500 and below
2 NMR INW195055/PAN	9,600 and below
1 NM N–S and 7 NM E–W of the PXR017022	6,500 and below
PXR019020	7,500 and below
PXR128013	5,500 and below
1 Square mile of the PXR194023	5,000 and below
1 NMR PXR129018	5,000 and below
1 NMR PXR316026.2	6,600 and below
3 NMR PXR 323024	6,000 and below
2 NM N–S and 4 NM E–W PXR325027	8,000 and below
1 NM Square TFD 3000 18/E60	6,300 and below
1 NMR TFD065025/PØ8	5,500 and below
1 NMR TFD143021	3,000 and below
4 NMR TFD010020	4,800 and below
1NMR TFD107036	5,000 and below
PØ8–COOLIDGE	10,000 and below
12 NW of DVT	6,500 and below
5 NMR DRK215013	11,500 and below

Pilots should use caution in these areas. For further information contact Prescott AFSS on 1–800–992–7433.

AEROBATIC OPERATIONS NORTHWEST OF TUCSON, AZ.

Practice and competitive aerobatic maneuvers are regularly scheduled on the Tucson VORTAC 295 radial at 25 miles and Tucson VORTAC 308 radial at 22 miles, sunrise to sunset, up to 5,000 MSL.

AEROBATIC OPERATIONS NORTHEAST OF REDLANDS, CA

Practice and competitive aerobatic maneuvers are regularly scheduled in the vicinity of the PDZ VORTAC 045 radial at 23 nautical miles from 1,500′ AGL up to and including 7,500′ MSL. The practice area is for waiver holders only. Pilots should use caution in this area. Frequency 123.3 is provided for air-to-air communications with other pilots using or transiting the area.

AEROBATIC OPERATIONS NORTHEAST OF SANTA PAULA, CA

Practice and competitive aerobatic maneuvers are regularly scheduled in the vicinity of FIM VORTAC, SR–SS, 1,500′ AGL to 5,500′ MSL. The Aerobatic Area is defined by FIM 220/004, to FIM 260/008, to FIM 285/009, to FIM 360/005, to FIM 055/014, to FIM 070/013. The practice area is for waiver holders only. Pilots should use caution in this area. Frequency 122.775 is provided to air-to-air communications with other pilots using or transiting the area.

AEROBATIC OPERATIONS IN COLORADO

Practice and competitive aerobatic maneuvers are regularly conducted during daylight hours at the following locations:
a. 2 NM radius GLL 180/009, 10000 MSL and below.
b. 1 NM radius Sterling Muni (STK), 4000 AGL and below.
c. 1 kilometer square, 800 to 3000 AGL 3 statute miles east of RWY 17–35, Kelly Airpark (CO15).
d. 1 statute mile square, surface to 4000 AGL. Center of the area is located 2850 feet east of RWY 18–36. Western boundary is 1000 feet from RWY 18–36 and northern boundary is 100 feet from RWY 08–26, Lamar Airport (LAA). The (LAA) ASOS will broadcast aerobatic area information when this area is active. For further information, contact Flight Services 1–800–WX–BRIEF.
e. 1 kilometer square, 5000 AGL .5 statute mile east of Ft. Morgan Muni (FMM).
f. 1 NM radius GLL 315/006, 10000 MSL and below. Mon–Sat 1500–2359, Sun 1600–2359.
g. 1 NM radius 10000 MSL and below. 6.2 statue miles northwest of Vance Brand (LMO) Mon–Sat 1500–2359, Sun 1600–2359.

AEROBATIC PRACTICE AREA
JEAN AIRPORT, JEAN, NEVADA

Aerobatic flight activity will be conducted within a 3300′ square box, located 2 miles west of Jean Airport (Specific area of operation is ½ mile radius from a point described by the LAS 190/20). Flights will occur from SFC to 6500 MSL, between 1 hour after sunrise to 1 hour before sunset daily. Pilots should use caution when operating within this area. To obtain a copy of the Certificate of Waiver outlining appropriate procedures for utilization of the practice area, ctc Henderson Executive Airport at (702) 261–4800.

AEROBATIC PRACTICE AREA
VAUGHN MUNICIPAL AIRPORT (N17), VAUGHN, NEW MEXICO

Aerobatic practice will be conducted within a 3 NM radius of the Vaughn Municipal Airport (N17), SFC to 11,000 feet MSL, SR–SS. For further information contact Flight Services at 1–800–WX–BRIEF (992)–7433).

EXTENSIVE FLIGHT TRAINING IN VICINITY OF
ERNEST A. LOVE FIELD, PRESCOTT, ARIZONA

Extensive flight training activity in areas 5 to 38 miles from the Prescott Airport 14,000 MSL and below. These areas are in use from sunrise to sunset daily. Participating traffic reports on 123.5.

EXTENSIVE FLIGHT TRAINING IN VICINITY OF
ANGWIN–PARRETT FIELD (203), ANGWIN, CALIFORNIA

Extensive flight training activity within a 10 NM radius of STS056024 (MAUCH INT), 4,500 MSL and below. This area is in use from 1400–0300 UTC daily. Participating traffic reports on 123.0.

EXTENSIVE FLIGHT TRAINING IN VICINITY
OF PROVO MUNICIPAL AIRPORT

Extensive flight training activity in areas 5 to 30 miles S & W of Provo Municipal Airport from the PVU260R–PVU150R, 9,000 MSL and below. These areas are in use from 1100Z to 0400Z Monday thru Saturday; participating traffic contact Eagle Base on 123.5.

UNMANNED AIRCRAFT SYSTEMS, SOUTHEASTERN, AZ

Unmanned aircraft system activity along the international border in southeastern Arizona. Pilots flying near the international border between Nogales, Arizona and the New Mexico border should be alert for unmanned aircraft systems operating from 14,000′ MSL to 16,000′ MSL inclusive, 0000–1500 UTC daily.

ROCKET FIRING SOUTHEAST OF RENO, NEVADA

Rocket firing occurs approximately on the Mustang VORTAC 107 radial at 7 miles, normally seven days a week, sunrise to sunset, up to but not including 1,000 ft above ground level.

GLIDER OPERATIONS NORTHWEST OF TUCSON, ARIZONA

There is regularly scheduled glider/soaring activity conducted from El Tiro Airport, which is located approximately on the Tucson VORTAC (116.0 MHz) 297° radial at 31 nautical miles: this is south of Pinal (Marana) Airpark and bordered by V16, V66, and V105. Activity at El Tiro is normally scheduled for Saturday, Sunday, and Wednesday, with much of the soaring conducted near the intersection of V66 and V105 at altitudes up to, but not including flight level 180.

CAUTION–TETHERED AEROSTAT RADAR SYSTEM (TARS)

A TARS (a large helium-filled balloon) operates continuously up to 15,000 feet, except during inclement weather or when the system is down for maintenance, in R–2312 near Fort Huachuca, Arizona. The tether is unmarked and is virtually impossible to see from only a few hundred feet. See the Phoenix Sectional Chart for location.

YOSEMITE NATIONAL PARK

Public law prohibits flight of VFR helicopters or fixed-wing acft below 2000 feet above the surface of Yosemite National Park. ''Surface'' refers to the highest terrain within the park within 2000 feet laterally of the route of flight or, within the Yosemite Valley, the uppermost rim of the valley.

CALIFORNIA CONDORS
Central California Coast Ranges

California Condors are currently being reintroduced to the Central California Coast by the Ventana Wilderness Society. There are two release sites; one below Anderson Peak near Big Sur (BSR VOR radial 150, 2 NM), the other in the Pinnacles National Monument (SNS VOR radial 099, 24 NM). California Condors can be identified in the air by their distinctive size and flight patterns. Like the Turkey Vulture, the California Condor is a large black bird with a naked head which uses topography and associated wind patterns for soaring flight. However, the California Condor is nearly twice as large as the Turkey Vulture, with a wingspan approaching ten feet. Condors normally soar at altitudes between 500 and 6,000 feet AGL. They have been known to fly up to 190 miles in a single day and could therefore be found over a very large area. Please be alert for the presence of these highly endangered birds throughout the Coastal Range from Mt Hamilton near San Jose, south to the Simi Valley, near Fillmore VOR (FIM), as well as the foothills along the west side of the San Joaquin Valley. For further information contact the Ventana Wilderness Society at 831–455–9514.

CALIFORNIA CONDORS
Pinnacles National Monument

California Condors are the largest land birds in North America and are currently being reintroduced at Pinnacles National Monument in central California. Weighing 15–25 pounds and with a wingspan of 9.5 feet, this endangered species presents a formidable in–flight hazard. Condors are capable of soaring at an altitude of 15,000 feet, although they are more often found between altitudes of 2,000–9,000 feet. Using GPS tracking devices on four condors, a high–use condor flight area was identified over Pinnacles National Monument. The Monument is requesting a clearance of 3,000 feet AGL over an approximately 11.5 square mile area, as indicated, where these and other condors are consistently soaring. Monument personnel hope that such a restriction will be a manageable compromise for the continued conservation of this endangered species and the safety of all pilots. For further information, please contact Pinnacles National Monument at (831) 389–4485.

GRAND CANYON
SPECIAL FLIGHT RULES AREA
Effective on September 22, 1988

GRAND CANYON—Special Flight Rules Area, SFAR–50–2. Special regulations apply to all aircraft operations below 14,500 feet MSL. Except in an emergency or if otherwise authorized by the Las Vegas Flight Standards District Office for certain limited operations, remain at or above the following altitudes: a) in the Eastern sector from Lees Ferry to North Canyon at 5,000 feet MSL; b) in the Eastern sector from North Canyon to Boundary Ridge at 6,000 feet MSL; c) in the Central sector from Boundary Ridge to Supai Point at 10,000 feet MSL; d) in the Central sector from Supai Point to Diamond Creek at 9,000 feet MSL; e) in the Western sector from Diamond Creek to the Grand Wash Cliffs at 8,000 feet MSL. In flight corridors use the following altitudes: northbound at 11,500 or 13,500 feet MSL; southbound at 10,500 or 12,500 feet MSL. Remain clear of the indicated flight-free zones.

CAUTION: High volume of tour operations within the area. The procedures do not relieve pilots from see-and-avoid responsibility or compliance with FAR 91.119. Pilots should contact a local FSS for NOTAM information prior to flight within the Special Flight Rules Area. Utilize the Las Vegas (LAS) altimeter setting west of Mt. Dellenbaugh and the Grand Canyon (GCN) altimeter setting east of Mt. Dellenbaugh. Monitor the frequencies indicated for each sector (Western–121.95; Central–127.05; Eastern–120.05). Refer to the Grand Canyon sectional chart and NOTAMS for additional information.

SPECIAL NORTH ATLANTIC, CARIBBEAN AND PACIFIC AREA COMMUNICATIONS

VHF air-to-air frequencies enable aircraft engaged in flights over remote and oceanic areas out of range of VHF ground stations to exchange necessary operational information and to facilitate the resolution of operational problems.

Frequencies have been designated as follows:

North Atlantic area:	123.45 MHz
Caribbean area:	123.45 MHz
Pacific area:	123.45 MHz

U.S. SPECIAL CUSTOMS REQUIREMENT

Air Commerce Regulations of the Treasury Department's Customs Service require all private aircraft arriving in the U.S. from a foreign place in the Western Hemisphere, (a) south of 33 degrees north latitude which cross into the U.S. over a point on the U.S./Mexican border between 97 and 120 degrees west longitude, or (b) south of 31 degrees north latitude which enter the U.S. via the Gulf of Mexico and Atlantic Coasts, to provide notice of intended arrival to the Customs Service at least one hour prior to crossing the U.S./Mexican border or the U.S. coastline. This notice may be provided by: (1) radio through an appropriate FAA Flight Service Station, (2) normal FAA flight plan notification procedures (a flight plan filed in Mexico does not meet this requirement due to unreliable relay of data), or (3) directly to the District Director of Customs or other Customs officer at place of first intended landing. Unless an exemption has been granted by Customs, private aircraft are required to make first landing in the U.S. at one of the following designated airports nearest to the point of border or coastline crossing:

Brownsville/South Padre Island International, Corpus Christi International, Del Rio International, El Paso International, Laredo International, Maverick County Memorial International, McAllen Miller International, Presidio–Lely International, Southwest Texas Regional, or William P. Hobby Airport of Texas; Calexico International, or Brown Field Municipal in California; Bisbee Douglas International, Nogales International, Tuscon International, or Yuma MCAS/Yuma International in Arizona; Las Cruces Intl in New Mexico; Lakefront or Louis Armstrong New Orleans Intl in Louisiana; Fort Lauderdale Executive, Fort Lauderdale–Hollywood International, Key West International, Miami International, Opa–Locka Executive Airport, Palm Beach International, St. Lucie County International, or Tampa International in Florida.

MILITARY TRAINING ROUTES

The DOD Flight Information Publication AP/1B provides textual and graphic descriptions and operating instructions for all military training routes (IR, VR, SR) and refueling tracks/anchors. Complete and more comprehensive information relative to policy and procedures for IRs and VRs is published in FAA Handbook 7610.4 (Special Military Operations) which is agreed to by the DOD and therefore directive for all military flight operations. The AP/1B is the official source of route data for military users.

CIVIL USE OF MILITARY FIELDS

U.S. Army, Air Force, Navy and Coast Guard Fields are open to civil fliers only in emergency or with prior permission.

Army installations, prior permission is required from the Commanding Officer of the installation.

For Air Force installations, prior permission should be requested at least 30 days prior to first intended landing from either Headquarters USAF (PRPOC) or the Commander of the installation concerned (who has authority to approve landing rights for certain categories of civil aircraft). For use of more than one Air Force installation, requests should be forwarded direct to Hq USAF (PRPOC), Washington, D.C. 20330.

Use of USAF installations must be specifically justified.

For Navy and Marine Corps installations, prior permission should be requested at least 30 days prior to first intended landing. An Aviation Facility License must be approved and executed by the Navy prior to any landing by civil aircraft.

Forms and further information may be obtained from the nearest U.S. Navy or Marine Corps aviation activity.

For Coast Guard fields prior permission should be requested from the Commandant, U.S. Coast Guard via the Commanding Officer of the field.

When instrument approaches are conducted by civil aircraft at military airports, they shall be conducted in accordance with the procedures and minimums approved by the military agency having jurisdiction over the airport.

AIRCRAFT LANDING RESTRICTIONS

Landing of aircraft at locations other than public use airports may be a violation of Federal or local law. All land and water areas are owned or controlled by private individuals or organizations, states, cities, local governments, or U.S. Government agencies. Except in emergency, prior permission should be obtained before landing at any location that is not a designated public use airport or seaplane base.

Landing of aircraft is prohibited on lands or waters administered by the National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, and on many areas controlled by the U.S. Army Corps of Engineers, unless prior authorization is obtained from the respective agency.

FAR–PART 139 CERTIFICATED AIRPORTS

Additional Certificated Airports
not contained in this Directory

NAME OF AIRPORT	IDENT	INDEX
NEVADA		
TONOPAH, Tonopah Test Range	TNX	E

CONTINUOUS POWER FACILITIES

In order to insure that a basic ATC system remains in operation despite an areawide or catastrophic commercial power failure, key equipment and certain airports have been designated to provide a network of facilities whose operational capability can be utilized independent of any commercial power supply.

In addition to those facilities comprising the basic ATC system, the following approach and lighting aids have been included in this program for a selected runway.

1. ILS(Localizer, Glide Slope, COMLO, Inner, Middle and Outer Markers)
2. Wind Measuring Capability
3. Approach Light System (ALS) or Short ALS (SALS)
4. Ceiling Measuring Capability
5. Touchdown Zone Lighting (TDZL)
6. Centerline Lighting (CL)
7. Runway Visual Range (RVR)
8. High Intensity Runway Lighting (HIRL)
9. Taxiway Lighting
10. Apron Light (Perimeter Only)

The following have been designated ''Continuous Power Airports,'' and have independent back up capability for the equipment installed.

Airport/Ident	Runway No.	Airport/Ident	Runway No.
Albuquerque, NM (ABQ)	08	Milwaukee, WI (MKE)	01L
Anchorage, AK (ANC)	07R	Minneapolis, MN (MSP)	30L
Andrews AFB, MD (ADW)	01L	Nashville, TN (BNA)	02L
Atlanta, GA (ATL)	09R	New Orleans, LA (MSY)	10
Baltimore, MD (BWI)	10	New York, NY (JFK)	04R
Bismarck, ND (BIS)	31	New York, NY (LGA)	22
Boise, ID (BOI)	10R	Newark, NJ (EWR)	04R
Boston, MA (BOS)	04R	Oklahoma City, OK (OKC)	35R
Charlotte, NC (CLT)	36L	Omaha, NE (OMA)	14R
Chicago, IL (ORD)	14R	Ontario, CA (ONT)	26L
Cincinnati, OH (CVG)	36C	Philadelphia, PA (PHL)	09R
Cleveland, OH (CLE)	06R	Phoenix, AZ (PHX)	08
Dallas/Fort Worth, TX (DFW)	17C	Pittsburgh, PA (PIT)	10L
Denver, CO (DEN)	35R	Reno, NV (RNO)	16R
Des Moines, IA (DSM)	31	Salt Lake City, UT (SLC)	34L
Detroit, MI (DTW)	03R	San Antonio, TX (SAT)	12R
El Paso, TX (ELP)	22	San Diego, CA (SAN)	09
Fairbanks, AK (FAI)	01L	San Francisco, CA (SFO)	28R
Great Falls, MT (GTF)	03	San Juan, PR (SJU)	08
Honolulu, HI (HNL)	08L	Seattle, WA (SEA)	16C
Houston, TX (IAH)	26L	St. Louis, MO (STL)	30R
Indianapolis, IN (IND)	05L	Tampa, FL (TPA)	36L
Jacksonville, FL (JAX)	07	Tulsa, OK (TUL)	36R
Kansas City, MO (MCI)	19R	Washington, DC (DCA)	01
Los Angeles, CA (LAX)	24R	Washington, DC (IAD)	01R
Memphis, TN (MEM)	36L	Wichita, KS (ICT)	01L
Miami, FL (MIA)	08R		

NOTE—The existing CPA runway is listed. Pending and future changes at some locations will require a revised runway designation.

NATURAL GAS FLARE
CARLSBAD/CAVERN CITY, NEW MEXICO

A natural gas flare is located at approximately N32–27–50.5/W104–34–24.2 (CNM 300/021), SFC to 4200 feet MSL. Pilots should use caution when operating in this area. For further information, contact Albuquerque AFSS on 1–505–243–7831.

SAN DIEGO INTERNATIONAL AIRPORT (SAN)
AIRCRAFT NOISE PROHIBITIONS/RESTRICTIONS

No departures or engine run–ups above idle power 0730–1430Z‡. FAR Part 36 Stage 2 departures prohibited 0600–1500Z‡. Per current FAA standards all helicopters are Stage 2. Valid emergency operations or mercy flights exempt from noise abatement restrictions. Operator must provide written report to SAN noise abatement office. Noise monitoring in effect continuously. All operations of aircraft which exceed 104 Effective Perceived Noise Decibels at the takeoff reference point per FAA AC 36 Series documentation are prohibited. Noise sensitive areas all quadrants; recommend pilots use best noise abatement procedures. Pilots are requested to minimize use of reverse thrust consistent with safe operations of aircraft to minimize noise impact on surrounding community. For additional noise level restrictions and information call 619–400–2781.

SPECIAL PROCEDURES
SAN FRANCISCO INTERNATIONAL AIRPORT
NOISE ABATEMENT PROCEDURES

Fly Quiet Program:

The Fly Quiet Program was developed to help pilots understand the rules and regulations for noise abatement at SFO and to show the public how well airline's participate in the noise abatement programs. The purpose of the Program is to encourage individual airlines to operate as quietly as possible at SFO. The Program promotes a participatory approach in complying with noise abatement procedures by grading airlines' performance and presenting these scores to the public via a published report. The Program consists of five grading elements:

1) The overall noise quality of each airline's fleet operating at SFO.
2) A measure of how well each airline complies with the nighttime Preferential Runway Use Program.
3) Assessment of how well each airline adheres to the Gap departure profile.
4) Assessment of how well each airline adheres to the Shoreline departure profile.
5) Evaluation of single overflight noise level exceedances.

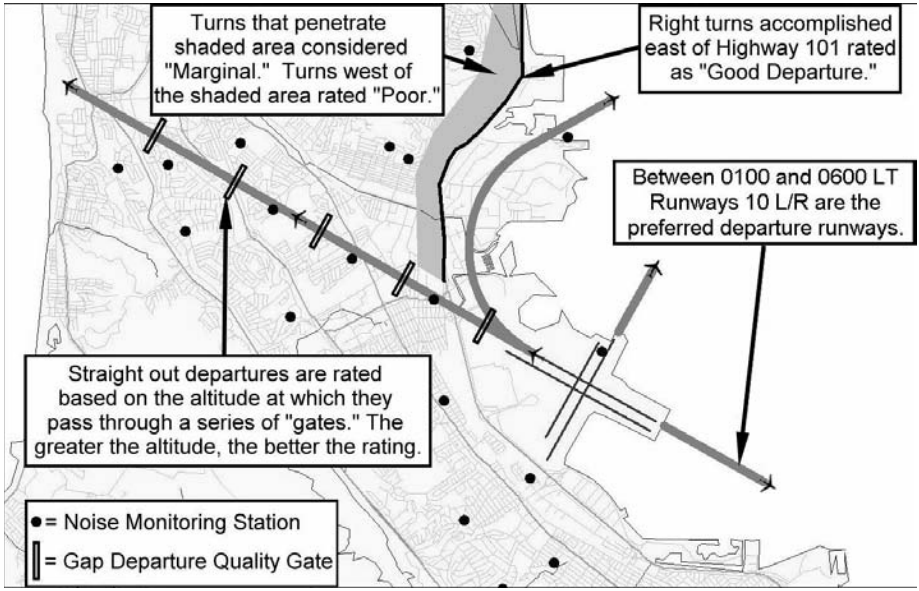
Flight Crews: By operating your aircraft as quietly as possible, you can directly influence your airline's Fly Quiet Program score. Here are some guidelines for maintaining a high score in the Fly Quiet Program:

(a) Preferential Runway Use Program—Between 0100 and 0600 (LT) the preferred departure runways for noise abatement are Runways 10 L/R. Pilots of heavy aircraft can significantly improve their airline's Fly Quiet Program scores by departing on Runways 10 L/R (weather permitting).

(b) Shoreline Departure Turn Quality—The radius of the initial turn after departure off Runways 28 L/R is a grading element of the Fly Quiet Program. Runway 28 L/R departures making excessively wide right turns overfly residential neighborhoods. By completing the initial right turn prior to crossing Highway 101, aircraft remain over industrial and commercial areas. **This applies to all Instrument Departure Procedures (IDPs) requiring right turns after departing Runways 28 L/R.**

(c) Gap Departure Climb Quality—Aircraft making straight out departures off Runways 28 L/R overfly heavily populated areas immediately west of the airport. Since ''higher is quieter,'' the Airport monitors aircraft altitudes along the departure route. Scores are assigned at specific points, or gates, set approximately one mile apart, with higher scores given to those aircraft that reach higher altitudes at the gates. **It is preferred that aircraft making straight–out departures from Runways 28 L/R climb as rapidly as possible.**

(d) Noise Exceedance Rating—Maximum noise level limits are established for selected noise monitor stations surrounding SFO. Pilots can improve their airline's exceedance rating by utilizing the Preferential Runway Use Program and complying precisely with the Gap and Shoreline Departure Procedures.



SPECIAL PROCEDURES
SAN FRANCISCO INTERNATIONAL AIRPORT
NOISE ABATEMENT PROCEDURES
PREFERENTIAL RUNWAYS

The SFO Nighttime Preferential Runway Use Program is a voluntary Program that was developed in 1988. SFO operates on two sets of parallel runways for both arrivals and departures, based on this runway configuration, there are three preferred nighttime preferential runway procedures:

1) The primary goal of the Program is to use Runways 10 L/R for take–off because they offer departure routing over the bay which will reduce the noise impacts over the communities surrounding SFO.

2) When departures from Runways 10 L/R are not possible, the second preference would be to depart Runways 28 L/R on the Shoreline or Quiet Departure Procedures. Both of these Procedures incorporate an immediate right turn after departure to avoid residential communities northwest of SFO.

3) The third preference is to depart on Runways 01 L/R. While this procedure directs aircraft over the bay, jet blast from these departures affects communities south of SFO.

The least desirable departure procedure at SFO is a straight–out departure on Runways 28 L/R these departures overfly densely populated communities immediately west of SFO and are discouraged at all hours.

The Airport Director has established a Nighttime Noise Clearance Center operated during 2200–0700 by a duty officer whose responsibilities include monitoring compliance with SFO's Preferential Runway Use Program and responding to requests for exemptions to the noise regulations.

ENGINE RUN–UP RESTRICTIONS

Run–ups of mounted aircraft engines for maintenance or test purposes is prohibited between the hours of 2200–0700 daily except as provided below:

1) An idle check of a single engine is allowed under the following conditions:

(a) An idle check of a single engine not to exceed a 5–minute duration may be conducted in the lease hold area. If more than one engine is to be checked, each engine must be checked separately and the cumulative duration of the idle checks cannot exceed 5–minutes.

(b) An idle check of a single engine or multiple engines (checked separately) which will exceed a duration of five minutes will be accomplished in the designated run–up areas. For purposes of noise abatement monitoring, this will be considered a power run–up.

During the hours of 2200–0700, the Operations Supervisor shall be called and permission received prior to any engine idle check or engine idle run–up, including any idle run for more than a cumulative duration of 5–minutes.

During other hours, the Operations Supervisor shall be called and permission received prior to any engine run–up. Any request for an engine run–up during the hours 2200–0700, other than that described above, which is the result of unusual or emergency circumstances, may be approved by the Nighttime Noise Clearance Center.

When approved and accomplished, the Maintenance Supervisor of the airline concerned must provide to the Airport Director a monthly report detailing the following:

(a) Date and time of the run–up
(b) Type of aircraft
(c) Aircraft identification number
(d) Location of the run–up
(e) Duration of the run–up
(f) An explanation of the unusual or emergency circumstances making the run–up necessary

Reports will be submitted to the Airport Director, Attn: Airport Operations within three working days after the last day of each calendar month.

SPECIAL PROCEDURES
SAN FRANCISCO INTERNATIONAL AIRPORT
NOISE ABATEMENT PROCEDURES

APU OPERATING RESTRICTIONS

Operators are encouraged to use ground power and air sources whenever practicable. APUs may be used when aircraft are being towed.

1) Domestic terminals—Use of APUs is prohibited between the hours of 2200–0600 except 30 minutes prior to departure, when passengers are aboard, or it is needed to test other aircraft equipment.

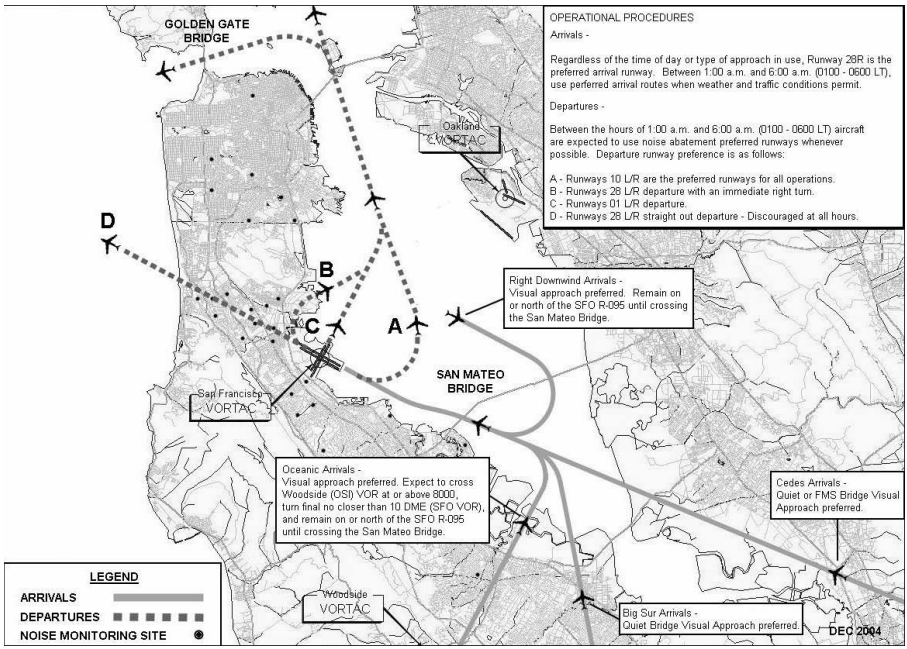
2) International Terminal—The following procedures apply:

(a) Aircraft scheduled to be at a gate in Boarding Areas A and G for more than 45 minutes between the hours of 0700–2200, are required to use 400Hz ground power and pre–conditioned air, where available. APUs are not authorized without prior permission is received from Airport Operations, during the use of ground power and pre–conditioned air until 30 minutes prior to push–back.

(b) All aircraft scheduled to be at an International Terminal gate between 2200–0700 hours are required to use 400Hz ground power and pre–conditioned air, where available, regardless of scheduled time at the gate. APUs are not authorized, unless prior permission is received from Airport Operations, during the use of ground power and pre–conditioned air until 30 minutes prior to push–back.

NOISE MONITORING SYSTEM

As of January 2005, the Airport installed a new Aircraft Noise Management System (ANMS) utilizing Lochard's Airport Noise and Operations Monitoring System (ANOMS(tm)) 8 product suite. This system consists of 29 fixed Environmental Monitoring Units (EMU) and four portable units. The previous passive radar system was replaced with Lochard's new hybrid, SkyTrak(tm), an integration of the FAA ARTS IIIE and live Mode S with passive radar that will drive the SFO community web site and deliver flight data throughout the airport.



CONTACT INFORMATION

For more information about the Fly Quiet Program or noise abatement procedures contact 650–821–5100.

AIR CARRIER OPERATIONS VICINITY OF LONG BEACH (DAUGHERTY FIELD), CA.

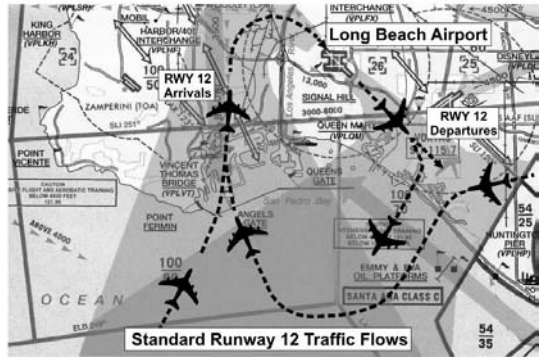
A wide mix of aircraft types including Air Carriers landing and departing Long Beach Daugherty Field, utilize the airspace south of Long Beach Airport (Daugherty Field) (LGB), Long Beach, California. The Class E airspace between Point Vicente, Catalina Island, and Huntington Beach accommodates pilot training from local flight schools, numerous IFR and VFR enroute aircraft, and helicopter and other aviation activities.

Participating flight training aircraft in Class E airspace south of Long Beach may:

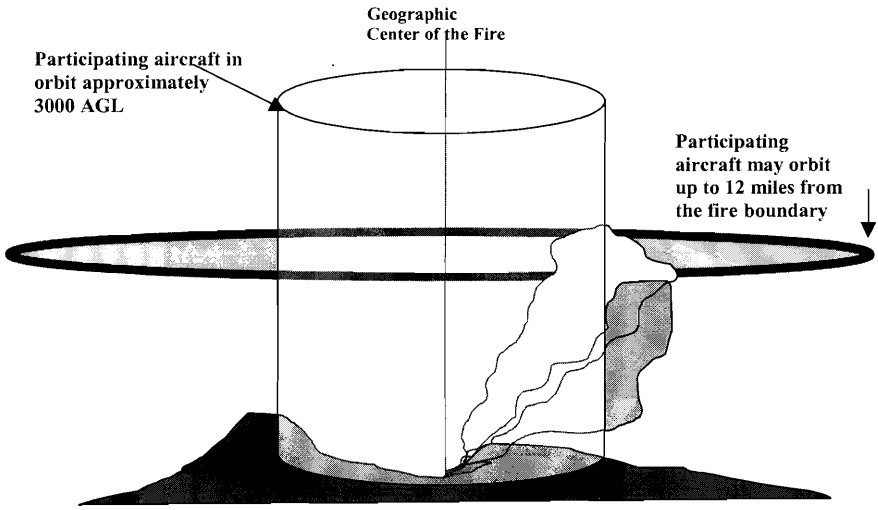
- Utilize helicopter frequency 129.0 at or below 1,000 MSL.
- Utilize air-to-air frequency 121.95 above 1,000 MSL and below 4,500 MSL.
- Participants are encouraged to make position reports relative to Palos Verde Point, Point Vicente and Point Fermin, Angels Gate, Queens Gate, Emmy & Eva Oil Platforms and the Queen Mary.

VFR flight following may be available from SOCAL TRACON as indicated on the LA Terminal Area Chart.





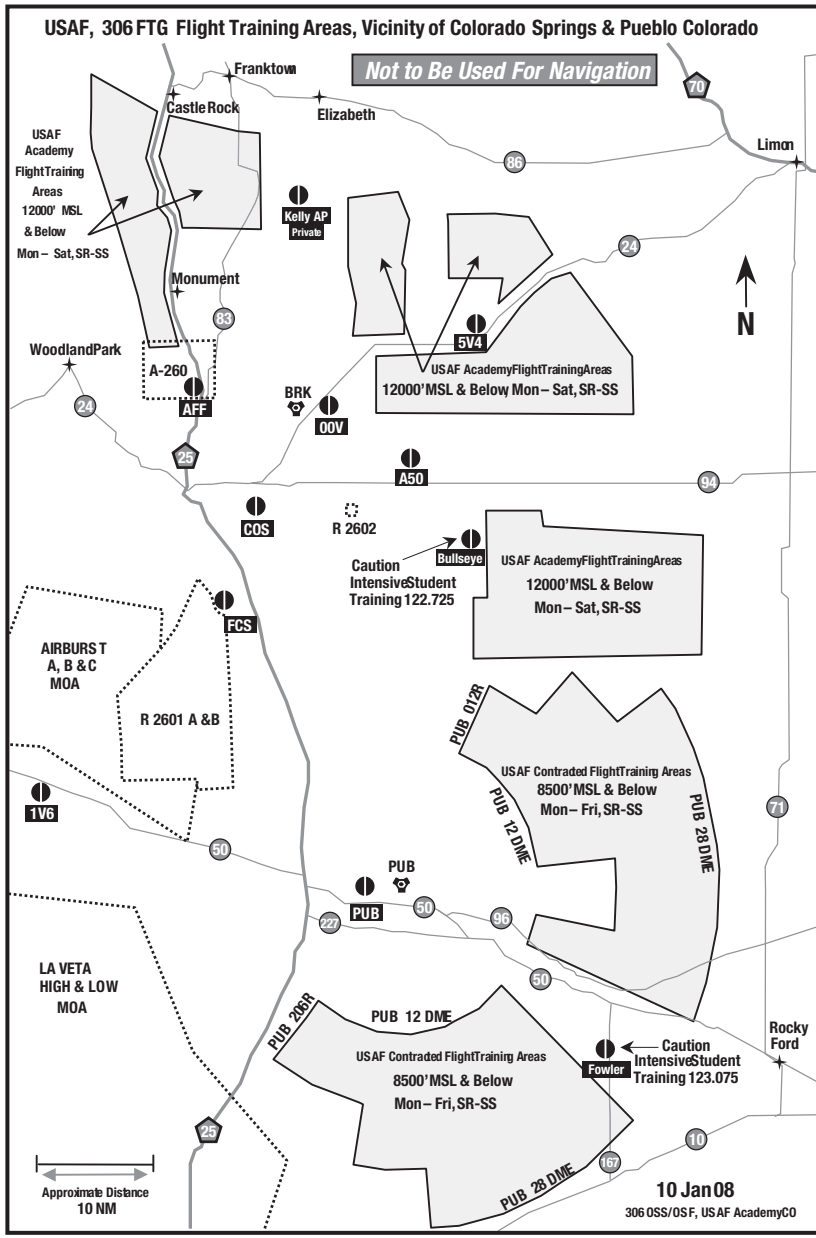
FIREFIGHTING TRAFFIC AREAS



Pilots are advised to stay clear of Firefighting Traffic Areas. Remain 15 miles from the area of activity. If you must over-fly the area, do so at an altitude of 5000 feet AGL above. However, to remain safe and out of the way of working aircraft, it is best to circumnavigate the area.

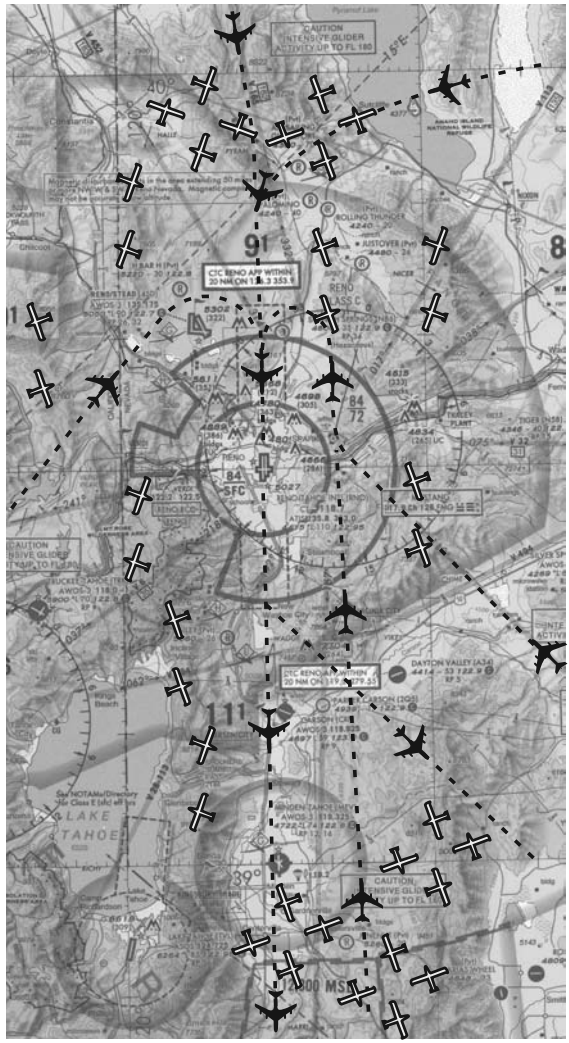
The wild-land fire environment can be very complex and involve a large number and variety of aircraft types including fixed and rotary wing aircraft. Some of the aircraft are small single and multi-engine command and control platforms that can be especially difficult to see and may give the appearance that the fire is not staffed. The aircraft participating in firefighting can orbit as far out as 12 miles from the perimeter of the fire. Any intrusion by aircraft not directly involved in the firefighting operation could delay the delivery of much needed retardant or water to ground firefighters and will adversely affect the safety of participating aircraft. Please stay well away from wild-land fires even if you feel that aircraft are not working the fire; they may be en route or unseen.

If you see a fire developing along your route, report it immediately to air traffic control who will advise the US Forest Service. The firefighting community would welcome this information.


USAF, 306 FTG Flight Training Areas, Vicinity of Colorado Springs & Pueblo Colorado
Not to Be Used For Navigation
Franktown
Castle Rock
Elizabeth
Limon
USAF Academy Flight Training Areas 12000' MSL & Below Mon – Sat, SR-SS
Kelly AP Private
Monument
Woodland Park
A-260
AFF
BRK
00V
5V4
USAF Academy Flight Training Areas 12000' MSL & Below, Mon – Sat, SR-SS
N
A50
COS
R 2602
Caution Intensive Student Training 122.725
Bullseye
USAF Academy Flight Training Areas 12000' MSL & Below Mon – Sat, SR-SS
FCS
AIRBURST A, B & C MOA
R 2601 A &B
1V6
PUB 012R
PUB 12 DME
PUB 28 DME
USAF Contraded Flight Training Areas 8500' MSL & Below Mon – Fri, SR-SS
PUB
LA VETA HIGH & LOW MOA
PUB 206R
PUB 12 DME
USAF Contraded Flight Training Areas 8500' MSL & Below Mon – Fri, SR-SS
PUB 28 DME
Fowler
Caution Intensive Student Training 123.075
Rocky Ford
Approximate Distance 10 NM
10 Jan 08
306 OSS/OSF, USAF Academy CO

GLIDER/SOARING ACTIVITIES AROUND THE RENO–TAHOE INTERNATIONAL AIRPORT

There is intense glider activity up to FL180 near the Reno–Tahoe International Airport. Gliders conduct aerobatic maneuvers and other soaring activities in airspace on or near arrival routes, departure routes, final approach courses and holding fixes for the Reno–Tahoe International Airport. Gliders operations may originate from the Air Sailing, Minden–Tahoe and Truckee (California) Airports. The Air Sailing Airport is located near the Mustang (FMG) 337 radial at 20 nautical miles, between Anaho, Pyram and Takle intersections. The Minden–Tahoe Airport is located near the FMG 172 radial at 32 nautical miles, between J5 and J94. The Truckee California Airport is located near the FMG 225 radial at 26 nautical miles, north of the Squaw Valley VOR between J32 and V392. Federal Aviation Regulations do not require gliders operators to equip, activate or to broadcast the location of their aircraft via transponder or radio communications while operating outside of Class A or C Airspace. Atmospheric conditions attract large quantities of gliders to the area and activity near mountain ridges or ''hot spots'' may be intense. Altitudes up to 17,999 have been observed and pilots should exercise due diligence when exiting Class A and C airspace. Pilots are encouraged to refer to the SFO Sectional Aeronautical Chart and to the remarks in the Airport/Facility Directory, Southwest US for the Reno–Tahoe International Airport (RNO) regarding glider activity. For further information, call Reno ATCT/TRACON at (775) 784–5582.



The following narratives summarize the FAR Part 93 Special Air Traffic Rules, and Airport Traffic Patterns in effect as prescribed in the rule. This information is advisory in nature and in no way relieves the pilot from compliance with the specific rules set forth in FAR Parts 91 and 93.

Special Airport Traffic Areas prescribed in Part 93 are depicted on Sectional Aeronautical Charts, World Aeronautical Charts, Enroute Low Altitude Charts, and where applicable, on VFR Terminal Area Charts.

OPERATIONS RESERVATIONS FOR HIGH DENSITY TRAFFIC AIRPORTS KENNEDY, LAGUARDIA, AND WASHINGTON REAGAN NATIONAL

The Federal Aviation Administration (FAA) has designated New York's Kennedy and LaGuardia Airports and Washington Reagan National Airport as High Density Traffic Airports (HDTA), Title 14, Code of Federal Regulations, part 93, subpart K, and has prescribed air traffic rules and requirements for operating aircraft (excluding helicopters) to and from those airports during certain hours.

Reservations are required for operations from 6 a.m. through 11:59 p.m. local time at LaGuardia Airport and Washington Reagan National Airport. Reservations at Kennedy Airport are required from 3 p.m. through 7:59 p.m. local time.

Reservation procedures are detailed in Advisory Circular 93–1, Reservations for Unscheduled Operations at High Density Traffic Airports. A copy of the advisory circular is available on the FAA website at http://www.faa.gov. Reservations for unscheduled operations are allocated through the Enhanced Computer Voice Reservation System (e–CVRS) accessible via telephone or the Internet. This system may not be used to make reservations for scheduled air carrier or commuter flights.

The toll–free telephone number for accessing e–CVRS is 1–800–875–9694 and is available for calls originating within the United States, Canada, and the Caribbean. Users outside the toll–free areas may access e–CVRS by calling the toll number of 703–707–0568. The Internet web address for accessing the e–CVRS is http://www.fly.faa.gov/ecvrs. If you have any questions about reservation requirements or are experiencing problems with the system, you may telephone the Airport Reservation Office at the Air Traffic Control System Command Center at (703) 904–4452.

Requests for instrument flight rules (IFR) reservations will be accepted beginning 72 hours prior to the proposed time of operation at the high–density airport. For example, a request for an 11 a.m. reservation on a Thursday will be accepted beginning at 11 a.m. on the previous Monday.

IFR reservations must be obtained prior to IFR landing or takeoff at an HDTA during slot controlled hours. An air traffic control (ATC) clearance does not constitute a reservation. A reservation does not constitute permission to operate at an HDTA if additional operational limits or procedures are required by NOTAM and/or regulation.

Aircraft involved in medical emergencies will be handled by ATC without regard to a reservation after obtaining prior approval of the ATC System Command Center on (703) 904–4452. ATC will accommodate declared other emergency situations without regard to slot reservations.

NOTE: Visual flight rule (VFR) reservations via ATC for unscheduled operations at LaGuardia are not authorized from 7 a.m. through 8:59 a.m. local time and 4 p.m. through 6:59 p.m. local time, Monday through Friday and Sunday evenings, unless otherwise announced by NOTAM. Both IFR and VFR operations during those time periods must obtain an advance reservation through e–CVRS.

LUKE AIR FORCE BASE (AFB), AZ SPECIAL AIR TRAFFIC RULE F.A.R PART 93 EFFECTIVE MAY 6, 2010

Title 14, Code of Federal Regulations, part 93, subpart O, has prescribed special air traffic rules and communication requirements for aircraft operating under Visual Flight Rules (VFR) in the vicinity of Luke Air Force Base.

Pilots are required to establish two-way communication with Luke Approach Control on 118.15 north of Luke AFB or 125.45 south of Luke AFB prior to entering the special air traffic rule area. See Phoenix Terminal Area Chart.

Pilots of non–radio equipped aircraft must request permission to enter the special air traffic rule area at least 24 hours before the proposed operation by telephoning Luke Approach Control at 623–856–6448.

FSS
TELEPHONE NUMBERS

Flight Service Station (FSS) facilities provide flight planning and weather briefing services to pilots. FSS services in the contiguous United States, Hawaii and Puerto Rico, are provided by a network of large hub facilities and smaller remote facilities which are interconnected with the hubs.

Selected remote FSS facilities across the contiguous United States have variable part–time operating hours. Because of the interconnectivity between remote and hub facilities, all FSS services are available continuously using published telephone numbers and radio frequencies.

Telephone Information Briefing Service (TIBS) is the FSS service that provides continuous recordings of meteorological and/or aeronautical information including area and/or route briefings, airspace procedures and special announcements. A touch–tone telephone is required to fully utilize this service.

Further information can be found in the Aeronautical Information Manual (AIM).

NATIONAL FSS TELEPHONE NUMBER

Pilot Weather Briefings 1–800–WX–BRIEF (1–800–992–7433)

OTHER FSS TELEPHONE NUMBERS (except in Alaska)

TIBS (see description above) 1–800–4TIBS–WX (1–877–484–2799)

Clearance Delivery Only 1–888–766–8267

Lifeguard Flights Only 1–877–LIF–GRD3 (1–877–543–4733)

Flights within DC SFRA & FRZ * 1–866–225–7410

* District of Columbia Special Flight Rules Area & Flight Restricted Zone

KEY to AERODROME FORECAST (TAF) and AVIATION ROUTINE WEATHER REPORT (METAR)

TAF KPIT 091730Z 091818 15005KT 5SM HZ FEW020 WS010/31022KT
FM1930 30015G25KT 3SM SHRA OVC015 TEMPO 2022 1/2SM +TSRA
OVC008CB
FM0100 27008KT 5SM SHRA BKN020 OVC040 PROB40 0407 1SM -RA BR
FM1015 18005KT 6SM -SHRA OVC020 BECMG 1315 P6SM NSW SKC

METAR KPIT 091955Z COR 22015G25KT 3/4SM R28L/2600FT TSRA OVC010CB
18/16 A2992 RMK SLP045 T01820159

Forecast	Explanation	Report
TAF	Message type: TAF-routine or TAF AMD-amended forecast, METAR-hourly, SPECI-special or TESTM-non-commissioned ASOS report	**METAR**
KPIT	ICAO location indicator	**KPIT**
091730Z	Issuance time: ALL times in UTC "Z", 2-digit date, 4-digit time	**091955Z**
091818	Valid period: 2-digit date, 2-digit beginning, 2-digit ending times	
	In U.S. **METAR**: CORrected ob; or AUTOmated ob for automated report with no human intervention; omitted when observer logs on	**COR**
15005KT	Wind: 3 digit true-north direction, nearest 10 degrees (or VaRiaBle); next 2-3 digits for speed and unit, KT (KMH or MPS); as needed, Gust and maximum speed; 00000KT for calm; for **METAR**, if direction varies 60 degrees or more, Variability appended, e.g. 180V260	**22015G25KT**
5SM	Prevailing visibility: in U.S., Statute Miles & fractions; above 6 miles in **TAF** Plus6SM. (Or, 4-digit minimum visibility in meters and as required, lowest value with direction)	**3/4SM**
	Runway Visual Range: R; 2-digit runway designator Left, Center, or Right as needed; "/"; Minus or Plus in U.S., 4-digit value, FeeT in U.S., (usually meters elsewhere); 4-digit value Variability 4-digit value (and tendency Down, Up or No change)	**R28L/2600FT**
HZ	Significant present, forecast and recent weather: see table (on back)	**TSRA**
FEW020	Cloud amount, height and type: SKy Clear 0/8, FEW >0/8-2/8, SCaTtered 3/8-4/8, BroKeN 5/8-7/8, OVerCast 8/8; 3-digit height in hundreds of ft; Towering CUmulus or CumulonimBus in **METAR**; in **TAF**, only CB. Vertical Visibility for obscured sky and height "VV004". More than 1 layer may be reported or forecast. In automated **METAR** reports only, CLeaR for "clear below 12,000 feet"	**OVC010CB**
	Temperature: degrees Celsius; first 2 digits, temperature "/" last 2 digits, dew-point temperature; Minus for below zero, e.g., M06	**18/16**
	Altimeter setting: indicator and 4 digits; in U.S., A-inches and hundredths; (Q-hectoPascals, e.g., Q1013)	**A2992**

KEY to AERODROME FORECAST (TAF) and AVIATION ROUTINE WEATHER REPORT (METAR)

Forecast	Explanation	Report
WS010/31022KT	In U.S. **TAF**, non-convective low-level (≤2,000 ft) Wind Shear; 3-digit height (hundreds of ft); "/"; 3-digit wind direction and 2-3 digit wind speed above the indicated height, and unit, KT	
	In **METAR**, ReMarK indicator & remarks. For example: Sea-Level Pressure in hectoPascals & tenths, as shown: 1004.5 hPa; Temp/ dew-point in tenths °C, as shown: temp. 18.2°C, dew-point 15.9°C	**RMK SLP045 T01820159**
FM1930	FroM and 2-digit hour and 2-digit minute **beginning** time: indicates significant change. Each FM starts on new line, indented 5 spaces.	
TEMPO 2022	TEMPOrary: changes expected for < 1 hour and in total, < half of 2-digit hour **beginning** and 2-digit hour **ending** time period	
PROB40 0407	PROBability and 2-digit percent (30 or 40): probable condition during 2-digit hour **beginning** and 2-digit hour **ending** time period	
BECMG 1315	BECoMinG: change expected during 2-digit hour **beginning** and 2-digit hour **ending** time period	

Table of Significant Present, Forecast and Recent Weather - Grouped in categories and used in the order listed below; or as needed in TAF, No Significant Weather.

QUALIFIER

Intensity or Proximity

- Light "no sign" Moderate + Heavy

VC Vicinity: but not at aerodrome; in U.S. **METAR**, between 5 and 10SM of the point(s) of observation; in U.S. **TAF**, 5 to 10SM from center of runway complex (elsewhere within 8000m)

Descriptor

MI Shallow	BC Patches	PR Partial	TS Thunderstorm
BL Blowing	SH Showers	DR Drifting	FZ Freezing

WEATHER PHENOMENA

Precipitation

DZ Drizzle	RA Rain	SN Snow	SG Snow grains
IC Ice crystals	PL Ice pellets	GR Hail	GS Small hail/snow pellets

UP Unknown precipitation in automated observations

Obscuration

BR Mist (≥5/8SM)	FG Fog (<5/8SM)	FU Smoke	VA Volcanic ash
SA Sand	HZ Haze	PY Spray	DU Widespread dust

Other

SQ Squall	SS Sandstorm	DS Duststorm	PO Well developed dust/sand whirls
FC Funnel cloud	+FC tornado/waterspout		

- Explanations in parentheses "()" indicate different worldwide practices.
- Ceiling is not specified; defined as the lowest broken or overcast layer, or the vertical visibility.
- NWS **TAFs** exclude turbulence, icing & temperature forecasts; NWS **METARs** exclude trend fcsts
- Although not used in US, Ceiling And Visibility OK replaces visibility, weather and clouds if: visibility ≥10 km; no cloud below 5000 ft (1500 m) or below the highest minimum sector altitude, whichever is greater and no CB; and no precipitation, TS, DS, SS, MIFG, DRDU, DRSA or DRSN.

UNITED STATES DEPARTMENT OF COMMERCE
NOAA/PA 96052 **National Oceanic and Atmospheric Administration**—National Weather Service

KEY AIR TRAFFIC FACILITIES

Air Traffic Control System Command Center

Main Number.....703–904–4400

RGNL AIR TRAFFIC DIVISIONS

REGION	TELEPHONE
Alaskan	907–271–5464
Central	816–329–2500
Eastern	718–553–4502
Great Lakes	847–294–7202
New England	781–238–7500
Northwest Mountain	425–227–2500
Southern	404–305–5500
Southwest	817–222–5500
Western Pacific	310–725–6500

AIR ROUTE TRAFFIC CONTROL CENTERS (ARTCCs)

ARTCC NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
Albuquerque	817–222–5006	7:30 a.m.–4:00 p.m.	505–856–4300
Anchorage	907–271–5936	7:30 a.m.–4:00 p.m.	907–269–1137
Atlanta	404–305–5180	7:30 a.m.–5:00 p.m.	770–210–7601
Boston	617–238–7001	7:30 a.m.–4:00 p.m.	603–879–6633
Chicago	847–294–8400	8:00 a.m.–4:00 p.m.	630–906–8221
Cleveland	847–294–8400	8:00 a.m.–4:00 p.m.	440–774–0310
Denver	425–227–1389	7:30 a.m.–4:00 p.m.	303–651–4100
Ft. Worth	817–222–5006	7:30 a.m.–4:00 p.m.	817–858–7300
Houston	817–222–5006	7:30 a.m.–4:00 p.m.	281–230–5300
Indianapolis	847–294–8400	8:00 a.m.–4:00 p.m.	317–247–2231
Jacksonville	404–305–5180	8:00 a.m.–4:30 p.m.	904–549–1501
Kansas City	816–329–3000	7:30 a.m.–4:00 p.m.	913–254–8500
Los Angeles	661–265–8200	7:30 a.m.–4:00 p.m.	661–265–8200
Memphis	404–305–5180	7:30 a.m.–4:00 p.m.	901–368–8103
Miami	404–305–5180	7:00 a.m.–3:30 p.m.	305–716–1500
Minneapolis	847–294–8400	8:00 a.m.–4:00 p.m.	651–463–5580
New York	718–995–5426	8:00 a.m.–4:40 p.m.	516–468–1001
Oakland	310–725–3300	6:30 a.m.–3:00 p.m.	510–745–3331
Salt Lake City	425–227–1389	7:30 a.m.–4:00 p.m.	801–320–2500
Seattle	425–227–1389	7:30 a.m.–4:00 p.m.	253–351–3500
Washington	718–995–5426	8:00 a.m.–4:30 p.m.	703–771–3401

MAJOR TERMINAL RADAR APPROACH CONTROLS (TRACONs)

TRACON NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
Atlanta	404–305–5180	7:00 a.m.–3:30 p.m.	404–669–1200
Chicago	847–294–8400	8:00 a.m.–4:00 p.m.	847–608–5509
Dallas/Ft. Worth	817–222–5006	7:30 a.m.–4:00 p.m.	972–615–2500
Denver	425–227–1389	7:30 a.m.–4:00 p.m.	303–342–1500
Houston	817–222–5006	7:30 a.m.–4:00 p.m.	281–230–8400
New York	718–995–5426	8:00 a.m.–4:30 p.m.	516–683–2901
Northern CA	310–725–3300	7:00 a.m.–3:30 p.m.	916–366–4001
Potomac	718–995–5426	8:00 a.m.–4:30 p.m.	540–349–7500
Southern CA	310–725–3300	7:30 a.m.–4:00 p.m.	858–537–5800

*Facilities can be contacted through the Rgnl Duty Officer during non-business hours.

KEY AIR TRAFFIC FACILITIES

DAILY NAS REPORTABLE AIRPORTS

AIRPORT NAME	*24 HR RGNL DUTY OFFICE TELEPHONE #	BUSINESS HOURS	BUSINESS TELEPHONE #
Albuquerque Intl Sunport, NM	817–222–5006	8:00 a.m.–5:00 p.m.	505–842–4366
Andrews AFB, MD	718–995–5426	8:00 a.m.–4:30 p.m.	301–735–2380
Baltimore/Washington Intl Thurgood Marshall, MD	718–995–5426	8:00 a.m.–4:30 p.m.	410–962–3555
Boston Logan Intl, MA	781–238–7001	7:30 a.m.–4:00 p.m.	617–455–3100
Bradley Intl, CT	617–238–7001	7:30 a.m.–4:00 p.m.	203–627–3428
Burbank/Bob Hope, CA	310–725–3300	7:00 a.m.–5:30 p.m.	818–567–4806
Charlotte Douglas Intl, NC	404–305–5180	8:00 a.m.–4:30 p.m.	704–344–6487
Chicago Midway, IL	847–294–8400	8:00 a.m.–4:00 p.m.	773–884–3670
Chicago O'Hare Intl, IL	847–294–8400	8:00 a.m.–4:00 p.m.	773–601–7600
Cleveland Hopkins Intl, OH	847–294–8400	8:00 a.m.–4:00 p.m.	216–898–2020
Covington/Cincinnati, OH	708–294–7401	8:00 a.m.–4:30 p.m.	606–767–1006
Dallas/Ft. Worth Intl, TX	817–222–5006	8:30 a.m.–5:00 p.m.	972–615–2531
Dayton Cox Intl, OH	847–294–8400	7:30 a.m.–4:00 p.m.	937–454–7300
Denver Intl, CO	425–227–1389	7:30 a.m.–4:00 p.m.	303–342–1600
Detroit Metro, MI	847–294–8400	8:00 a.m.–4:00 p.m.	734–955–5000
Fairbanks Intl, AK	907–271–5936	7:30 a.m.–4:00 p.m.	907–474–0050
Fort Lauderdale Intl, FL	404–305–5180	7:00 a.m.–3:30 p.m.	305–356–7932
George Bush Intercontinental/Houston, TX	817–222–5006	7:30 a.m.–4:00 p.m.	713–230–8400
Hartsfield–Jackson Atlanta Intl, GA	404–305–5180	7:00 a.m.–3:30 p.m.	404–669–1200
Honolulu Intl, HI	310–643–3200	7:30 a.m.–4:00 p.m.	808–840–6100
Houston Hobby, TX	817–222–5006	8:00 a.m.–5:00 p.m.	713–847–1400
Indianapolis Intl, IN	847–294–8400	8:00 a.m.–4:00 p.m.	317–484–6600
Kahului/Maui, HI	310–643–3200	7:30 a.m.–4:00 p.m.	808–877–0725
Kansas City Intl, MO	816–329–3000	7:30 a.m.–4:00 p.m.	816–329–2700
Las Vegas McCarran, NV	310–725–3300	7:30 a.m.–4:00 p.m.	702–262–5978
Los Angeles Intl, CA	310–725–3300	7:00 a.m.–3:30 p.m.	310–342–4900
Louis Armstrong New Orleans Intl, LA	817–222–5006	7:00 a.m.–4:30 p.m.	504–471–4300
Memphis Intl, TN	404–305–5180	7:30 a.m.–4:00 p.m.	901–322–3350
Miami Intl, FL	404–305–5180	7:00 a.m.–4:00 p.m.	305–869–5400
Minneapolis/St. Paul, MN	847–294–8400	8:00 a.m.–4:00p.m.	612–713–4000
Nashville Intl, TN	404–305–5180	7:00 a.m.–3:30 p.m.	615–781–5460
New York Kennedy Intl, NY	718–995–5426	8:00 a.m.–4:30 p.m.	718–656–0335
New York La Guardia, NY	718–995–5426	8:00 a.m.–4:30 p.m.	718–335–5461
Newark Liberty Intl, NJ	718–995–5426	8:00 a.m.–4:30 p.m.	973–645–3103
Norman Y. Mineta San Jose Intl, CA	310–643–3200	7:30 a.m.–4:00 p.m.	408–982–0750
Ontario Intl, CA	310–643–3200	7:30 a.m.–4:00 p.m.	909–983–7518
Orlando Intl, FL	404–305–5180	7:30 a.m.–5:00 p.m.	407–850–7000
Philadelphia Intl, PA	718–995–5426	8:00 a.m.–4:30 p.m.	215–492–4100
Phoenix Sky Harbor Intl, AZ	310–643–3200	7:30 a.m.–4:00 p.m.	602–379–4226
Pittsburgh Intl, PA	718–995–5426	8:00 a.m.–4:30 p.m.	412–269–9237
Portland Intl, OR	425–227–1389	7:30 a.m.–4:00 p.m.	503–493–7500
Raleigh-Durham, NC	404–305–5180	8:00 a.m.–4:30 p.m.	919–840–5544
Ronald Reagan Washington National, DC	718–995–5426	8:00 a.m.–4:30 p.m.	703–413–1535
Salt Lake City, UT	425–227–1389	7:30 a.m.–4:00 p.m.	801–325–9600
San Antonio Intl, TX	817–222–5006	8:00 a.m.–4:30 p.m.	210–805–5507
San Diego Lindbergh Intl, CA	310–725–3300	8:00 a.m.–4:30 p.m.	619–299–0677
San Francisco Intl, CA	310–643–3200	7:00 a.m.–3:30 p.m.	650–876–2883
San Juan Intl, PR	404–305–5180	7:30 a.m.–5:00 p.m.	809–253–8663
Seattle–Tacoma Intl, WA	425–227–1389	7:30 a.m.–4:00 p.m.	206–768–2900
St. Louis Lambert, MO	816–329–3000	7:30 a.m.–4:00 p.m.	314–890–1000
Tampa Intl, FL	404–305–5180	7:30 a.m.–4:00 p.m.	813–371–7700
Ted Stevens Anchorage Intl, AK	907–271–5936	7:30 a.m.–4:00 p.m.	907–271–2700
Teterboro, NJ	718–995–5426	8:00 a.m.–4:30 p.m.	201–288–1889
Washington Dulles Intl, DC	718–995–5426	8:00 a.m.–4:30 p.m.	703–661–6031
West Palm Beach, FL	404–305–5180	8:00 a.m.–4:30 p.m.	561–683–1867
Westchester Co, NY	718–995–5426	8:00 a.m.–4:30 p.m.	914–948–6520

*Facilities can be contacted through the Rgnl Duty Officer during non-business hours.

Air Route Traffic Control Center frequencies and their remoted transmitter sites are listed below for the coverage of this volume. Bold face type indicates high altitude frequencies, light face type indicates low altitude frequencies. To insure unrestricted IFR operations within the high altitude enroute sectors, the use of 720 channel communications equipment (25 kHz channel spacing) is required.

ⓇALBUQUERQUE CENTER – 134.6 132.8 **H–4–5–6–7, L–5–6–7–8–10–15–17–19**
Alamogordo – 132.65 132.65
Animas – 134.45 **133.0** **(KZAB)**
Carlsbad – 135.875
Childs Peak – 135.15 132.45 126.45 125.25
Clines Corner – 133.65 133.65 132.8 125.075
El Paso B – 128.2 **125.525**
Globe Nr 1 – 135.725 132.9 132.9
Globe Nr 2 – 135.15 133.85 **132.35** 132.35 125.4
Mesa Rica – 125.075 119.45
Mount Dora – 133.05 127.85
Prescott – 135.325 134.325 128.45
Raton – 132.8
Roswell – 132.65 132.65
Sandia Mountain – 132.8
Silver City – 134.45
Tesuque Peak – 132.8
Truth or Consequences – 128.2
Tucson – 134.45 **133.0**
Tucumcari – 132.32 126.92 126.85 **119.45**
West Mesa – 134.6 133.65 133.65 124.325 **119.45**
Winslow – 128.125 124.5
Zuni – 134.6 132.9 132.9 124.325 **120.55**

ⓇDENVER CENTER – 125.9 **H–1–2–3–4–5–6, L–8–9–10–11–12–13–14–15**
Alamosa – 128.375 **(KZDV)**
Aspen – 134.5 **132.85** 125.35 119.85
Brush A – 133.95
Brush B – 118.475
Cortez – 134.7 118.575
Denver – 133.4 **132.85** 128.65 **126.875** 125.95
Denver A – 126.5
Denver B – 119.85
Durango – 118.575
Eastonville – 134.975
Farmington – 128.125 125.675 118.575
Goodland – 132.5
Grand Mesa – 135.125 134.275 126.725 125.675
Grand Mesa A – 125.35
Grand Mesa B – 134.5
Gunnison – 133.525 125.35
Hanksville – 127.55
Hayden – 128.325 120.475
Kremmling – 132.85 128.65
La Junta – 134.125 133.4 **132.225** 128.37
Montrose – 125.35
Ogallala – 126.325 132.7
Pueblo – 135.4 132.225 128.375
Tuba City – 132.875 127.55 **118.225**
Walton Peak – 126.5

ⓇL. A. CENTER **H–3–4, L–3–4–5–7–8–9, A–2**
Arr—Dep U.S. – 135.45 134.55 134.4 133.4 **132.15** 128.05 **127.4** 126.4 126.0 119.0 **(KZLA)**
Bakersfield – 127.1
Baldwin Hills – 132.85
Barstow – 134.65 **133.55** 132.5 132.3 126.35 **125.725**
Blythe – 134.475 127.525
Cedar City – 135.55 135.25 127.35 124.2
Edom Hill – 133.75 **126.7**
Julian – 127.525 126.775
Keeler – 124.625 124.625
Laguna – 128.6 128.15 **125.65** 125.65 **119.95**
Lebec – 135.3 128.375

Mount Potosi – 132.625 124.625 124.625
Nelson – 134.65 **127.35** 124.85 124.2 **118.025**
Ontario – 125.65
Palmdale – 132.5 125.275
Peach Springs – 128.075
Pleasants Peak – 132.85 125.275 **119.95**
Riverside – 126.35
Saddle Peak – 132.6 125.8
San Luis Obispo – 119.05
Santa Barbara – 135.5 **132.15 126.525 119.05**
Santa Catalina – 134.575
Seligman – 133.2 124.85
Tonopah – 124.625
Twentynine Palms – 133.2 128.15 126.35
Whittier – 125.275
Yuma – 126.775

ⓇOAKLAND CENTER — **H–3–4, L–2–3–7–5–9–11, A–2**
Angels Camp – 134.375 132.95 127.95 126.85 121.25 119.75 — **(KZOA)**
Bishop – 125.75
Fallon – 134.45 128.8
Ferndale – 134.15 134.15
Fresno – 134.375 133.7 132.8 126.9 123.8
Half Moon Bay – 134.15 134.15 127.45 125.45 119.475
Hollister – 127.45
Mina – 132.05 127.175 125.75
Mount Tamalpais – 127.8
Priest – 134.55 133.7 132.8 128.7
Red Bluff – 134.975 132.2 **119.975**
Reno – 134.45 128.8
Sacramento – 132.95
San Luis Obispo – 128.7
South Lake Tahoe – 134.3
Squaw Valley – 127.95
Tonopah – 132.05 125.75
Ukiah – 134.975 132.2 127.8 **119.975**

ⓇSALT LAKE CITY CENTER — **H–1–2–3, L–9–11–12–13–14**
Battle Mountain – 132.25 **128.725** — **(KZLC)**
Bryce Canyon – 133.6
Cedar City – 125.575 125.575
Delle – 132.025 **128.55** 128.55
Delta – 127.825 125.575
Elko – 132.25 **128.725**
Ely – 133.45
Fairfield – 133.9
Francis Peak – 135.775 127.7 **119.95**
Hanksville – 133.6 133.6
Myton – 135.775 119.95
Sunnyside – 133.9 **127.925** 127.925 125.575
Tonopah – 133.45 133.45
Wilson Creek – 134.525 133.45 133.45 **127.925** 127.925
Winnemucca – 132.25

ⓇSEATTLE CENTER — **H–1–3, L–1–2–11–13**
Antelope Mountain – 124.85
Arcata – 124.85
Ferndale – 135.15 124.85 — **(KZSE)**
Klamath Falls - 134.9 127.6

VHF frequencies available at Flight Service Stations and at their remote communication outlets (RCO's) are listed below for the coverage of this volume. Frequencies in bold type are available all altitudes but recommended for use FL180 and above. ''T'' indicates transmit only and ''R'' indicates receive only. RCO's available at NAVAID's are listed after the NAVAID name. RCO's not at NAVAID's are listed by name.

ALBUQUERQUE AFSS

ALBUQUERQUE RCO 122.0 **122.55**
ALAMOGORDO RCO 122.15
ANTON CHICO VORTAC 117.8T 122.1R
CARLSBAD RCO **122.65**
CIMARRON VORTAC 116.4T 122.1R
CLINES CORNERS RCO 122.3
CLOVIS RCO 122.5
CORONA VORTAC 115.5T 122.1R
DEMING RCO 122.2
FARMINGTON RCO **122.4**
GALLUP VORTAC 115.1T 122.1R **122.6**
HOBBS RCO 122.2
LAS VEGAS RCO 122.6
ROSWELL RCO **122.45**
RUIDOSO RCO 122.25
SANTA FE RCO 122.2
SILVER CITY VORTAC 110.8T 122.1R
SOCORRO VORTAC 116.8T 122.1Re
TAOS VORTAC 117.6T 122.1R 122.25
TRUTH OR CONSEQUENCES RCO 122.2
TUCUMCARI RCO **122.35**
ZUNI RCO 122.05

CEDAR CITY AFSS

ABAJO PEAK RCO 122.55
BONNEVILLE VORTAC 112.3T 122.1R
BRYCE CANYON RCO 122.2
BULLFROG BASIN RCO **122.4**
CARBON RCO 122.2
CEDAR CITY RCO 122.0 122.2 122.6
DELLE RCO **122.5**
DELTA RCO 122.55
FAIRFIELD RCO 122.25
FRANCIS PEAK RCO 122.2
HALLS CROSSING RCO 122.4
HANKSVILLE RCO 122.65
LUCIN VORTAC 113.6T 122.1R
MILFORD VORTAC 112.1T 122.1R
MOAB RCO 122.3
MYTON VORTAC 112.7T 122.1R
OGDEN RCO 122.45
RICHFIELD RCO **122.5**
ST GEORGE RCO 122.5
SALT LAKE CITY RCO 122.4
VERNAL RCO 122.35

DENVER AFSS

AKRON RCO 120.675
ALAMOSA RCO 122.15
BADGER MOUNTAIN RCO 122.2
BLACK FOREST RCO 122.25
BLUE MESA RCO 122.55
CORTEZ RCO 122.3
DENVER RCO 122.0 122.2 122.35 123.65
DOVE CREEK RCO 122.5
DURANGO RCO **122.35**
EAGLE RCO 122.2
FORT COLLINS–LOVELAND RCO 122.4
GILL RCO 122.65
GLENWOOD SPRINGS RCO 122.2
GRAND JUNCTION RCO 122.6
GRAND MESA RCO 122.2
HAYDEN RCO 122.25
KREMMLING RCO 122.3
LA JUNTA RCO **122.6**

LAMAR VORTAC 116.9T 122.1R
LIMON RCO 122.475
MEEKER RCO 122.15
MONTROSE RCO 122.65
PUEBLO RCO 122.2
RANGELY RCO 122.65
RED TABLE MOUNTAIN RCO 122.4
RIFLE RCO 122.5
STEAMBOAT SPRINGS RCO 122.2
TELLURIDE RCO 122.15
TRINIDAD RCO 122.2

HAWTHORNE AFSS

BURBANK RCO 122.35
FILLMORE VORTAC 112.5T 122.1R
GUADALUPE VOR 111.0T 122.1R
HAWTHORNE RCO 122.0 122.2 122.5
PASO ROBLES RCO 122.4
SAN MARCUS VORTAC 114.9T 122.1R 122.3

OAKLAND AFSS

ARCATA RCO 122.6
CRESCENT CITY RCO 122.3
EUREKA RCO 122.35
GARBERVILLE RCO 122.3
MOUNTAIN VIEW RCO **122.5**
MOUNT TAMALPAIS RCO **122.35**
OAKLAND RCO 122.0 122.2 **122.5** 129.4 131.95
POINT ARENA RCO 122.6
SALINAS RCO **122.6**
UKIAH RCO **122.35**

PRESCOTT AFSS

AJO RCO 122.65
BAGDAD RCO 122.5
BISBEE RCO 122.4
BLACK METAL PEAK RCO 122.55
BUCKEYE VORTAC 110.6T 122.1R
COCHISE VORTAC 115.8T 122.1R
DOUGLAS RCO 122.6
FLAGSTAFF VOR/DME 113.85T 123.65R
GILA BEND VORTAC 116.6T 122.1R
GLOBE RCO 122.3
GRAND CANYON RCO 123.65
KAYENTA RCO 122.45
KINGMAN VOR/DME 108.8T 122.1R
MINGUS MOUNTAIN RCO **122.3**
MOUNT LEMMON RCO 122.4
NEEDLES VORTAC 115.2T 122.1R
NOGALES RCO 122.4
PAGE RCO 122.6
PEACH SPRINGS RCO 122.25
PHOENIX RCO 122.2 122.6
PRESCOTT RCO 122.2 122.4
SAFFORD RCO 122.3
ST JOHNS VORTAC 112.3T 122.1R
STANFIELD VORTAC 114.8T 122.1R
TUBA CITY VORTAC 113.5T 122.05R
TUCSON RCO 122.2
WINSLOW RCO 122.6
YUMA RCO 122.2

RANCHO MURIETA AFSS

ANGELS CAMP RCO **122.3**
ANTELOPE MOUNTAIN RCO 122.4
BAKERSFIELD RCO **122.45**
CHICO VOR/DME 109.8T 122.1R
EL NIDO VOR/DME 114.2T 122.1R
FALL RIVER MILLS RCO 122.4
FELLOWS VORTAC 117.5T 122.1R
FORT JONES VOR/DME 109.6T 122.1R

FRESNO RCO 122.2 **122.55**
GORMAN VORTAC 116.1T 122.1R
HANGTOWN VOR/DME 115.5T 122.1R
MARYSVILLE VOR/DME 110.8T 122.1R 122.6
MAXWELL VORTAC 110.0T 122.1R
MODESTO VOR/DME 114.6T 122.1R
PANOCHE VORTAC 112.6T 122.1R
QUINCY RCO 122.4
RANCHO MURIETA RCO 122.2
RED BLUFF RCO **122.4**
REDDING VOR/DME 108.4T 122.1R
SACRAMENTO RCO **122.05**
STOCKTON RCO 122.65
TULE PORTERVILLE VOR/DME 109.2T 122.1R
VISALIA VOR/DME 109.4T 122.1R
WEAVERVILLE RCO 122.4

RENO AFSS

BEATTY VORTAC 114.7T 122.1R
COALDALE VORTAC 117.7T 122.1R
CURRANT RCO 122.3
ELKO RCO 122.6
ELY RCO 122.2
EUREKA RCO 122.3
HAZEN VORTAC 114.1T 122.1R
JACKPOT RCO 122.5
LAS VEGAS RCO 122.4
LOVELOCK RCO 122.4
MINA VORTAC 115.1T 122.1R
MORMON MESA VORTAC 114.3T 122.1R
MOUNT LEWIS RCO **122.65**
MOUNT POTOSI RCO 122.35
RENO RCO 122.2 122.5
SOD HOUSE RCO 122.6
SQUAW VALLEY RCO 122.25
TONOPAH RCO 122.6
WELLS VOR 114.2T 122.1R
WILSON CREEK VORTAC 116.3T 122.1R
WINNEMUCCA RCO 122.3

RIVERSIDE AFSS

BARSTOW RCO 122.3
BISHOP RCO 122.6
BLYTHE RCO 122.4
DAGGETT RCO 122.2
GOFFS VORTAC 114.4T 122.05R
FURNACE CREEK RCO 122.2
HECTOR VORTAC 112.7T 122.1R
HOMELAND VOR 113.4T 122.1R
LANCASTER RCO 122.2
MAMMOTH RCO 122.15
NEEDLES RCO 122.2
PALM SPRINGS VORTAC 115.5T 122.1R
PARKER VORTAC 117.9T 122.1R
POMONA RCO 123.65
RAND MOUNTAIN RCO 122.4
RIVERSIDE RCO 122.05 122.2
SANTA ANA RCO 122.45
THERMAL RCO **122.3**
TWENTYNINE PALMS VORTAC 114.2T 122.1R

SAN DIEGO AFSS

BARD VORTAC 116.8T 122.1R
IMPERIAL VORTAC 115.9T 122.1R 122.5
JULIAN RCO 123.65
OCEANSIDE VORTAC 115.3T 122.1R
SAN DIEGO RCO 122.2 122.4
YUMA RCO 122.6

FLIGHT STANDARDS DISTRICT OFFICES (FSDO)

Below is a list of FSDO's in the area of coverage of this directory. These offices serve the aviation industry and the general public on matters relating to certification and operation of general aviation aircraft. Address letters to Manager, Flight Standards District Office–Federal Aviation Administration.

ARIZONA

17777 N. Perimeter Drive, Suite 101
Scottsdale, AZ 85255
Telephone: 480–419–0111

CALIFORNIA

Fresno Air Terminal
4955 E. Anderson, Suite #110
Fresno, CA 93727–1573
Telephone: 559–487–5306

5001 Airport Plaza Drive, Suite #100
Long Beach, CA 90815
Telephone: 562–420–1755

2250 E. Imperial Highway, Suite #140
El Segundo, CA 90245
Telephone: 310–215–2150

1420 Harbor Bay Parkway, Suite 280
Alameda, CA 94502–7083
Telephone: 510–748–0122
Fax: 510–748–9559

6961 Flight Rd.
Riverside, CA 92504
Telephone: 951–276–6701

6650 Belleau Wood Lane
Sacramento, CA 95822
Telephone: 916–422–0272

8525 Gibbs Drive, Suite 120
San Diego, CA 92123
Telephone: 619–557–5281

San Francisco IFO
831 Mitten Road, Room 105
Burlingame, CA 94010–1303
Telephone: 650–876–2771

San Francisco CMO
863 Mitten Road, Building B
Burlingame, CA 94010–1303
Telephone: 650–876–9013

1250 Aviation Ave., Suite 295
San Jose, CA 95110–1130
Telephone: 408–291–7681

16501 Sherman Way, Suite 330
Van Nuys, CA 91406
Telephone: 818–904–6291

COLORADO

26805 E. 68th Avenue, Suite 200
Denver, CO 80249–6361
Telephone: 303–342–1100

NEVADA

7181 Amigo Street, Suite 180
Las Vegas, NV 89119
Telephone: 702–269–1445
Fax: 702–269–8013

4900 Energy Way
Reno, NV 89502
Telephone: 775–858–7700

NEW MEXICO

1601 Randolph Road SE, Suite 200N
Albuquerque, NM 87106
Telephone: 505–764–1200
1–800–531–8999 (NM only)
1–800–531–1124

UTAH

1020 North Flyer Way
Salt Lake City, UT 84116
Telephone: 801–257–5020

PREFERRED IFR ROUTES

A system of preferred routes has been established to guide pilots in planning their route of flight, to minimize route changes during the operational phase of flight, and to aid in the efficient orderly management of the air traffic using federal airways. The preferred IFR routes which follow are designed to serve the needs of airspace users and to provide for a systematic flow of air traffic in the major terminal and en route flight environments. Cooperation by all pilots in filing preferred routes will result in fewer traffic delays and will better provide for efficient departure, en route and arrival air traffic service.

The following lists contain preferred IFR routes for the low altitude stratum and the high altitude stratum. The high altitude list is in two sections; the first section showing terminal to terminal routes and the second section showing single direction route segments. Also, on some high altitude routes low altitude airways are included as transition routes.

The following will explain the terms/abbreviations used in the listing:

1. Preferred routes beginning/ending with an airway number indicate that the airway essentially overlies the airport and flight are normally cleared directly on the airway.
2. Preferred IFR routes beginning/ending with a fix indicate that aircraft may be routed to/from these fixes via a Standard Instrument Departure (SID) route, radar vectors (RV), or a Standard Terminal Arrival Route (STAR).
3. Preferred IFR routes for major terminals selected are listed alphabetically under the name of the departure airport. Where several airports are in proximity they are listed under the principal airport and categorized as a metropolitan area; e.g., New York Metro Area.
4. Preferred IFR routes used in one direction only for selected segments, irrespective of point of departure or destination, are listed numerically showing the segment fixes and the direction and times effective.
5. Where more than one route is listed the routes have equal priority for use.
6. Official location identifiers are used in the route description for VOR/VORTAC navaids.
7. Intersection names are spelled out.
8. Navaid and distance fixes (e.g., ARD201113) have been used in the route description in an expediency and intersection names will be assigned as soon as routine processing can be accomplished. Navaid radial (no distance stated) may be used to describe a route to intercept a specified airway (e.g., MIV MIV101 V39); another navaid radial (e.g., UIM UIM255 GSW081); or an intersection (e.g., GSW081 FITCH).
9. Where two navaids, an intersection and a navaid, a navaid and a navaid radial and distance point, or any navigable combination of these route descriptions follow in succession, the route is direct.
10. The effective times for the routes are in UTC. During periods of daylight saving time effective times will be one hour earlier than indicated. All states observe daylight saving time except Arizona, Puerto Rico and the Virgin Islands. Pilots planning flight between the terminals or route segments listed should file for the appropriate preferred IFR route.
11. (90–170 incl) altitude flight level assignment in hundred of feet.
12. The notations ''pressurized'' and ''unpressurized'' for certain low altitude preferred routes to Kennedy Airport indicate the preferred route based on aircraft performance.
13. High Altitude Preferred IFR Routes are in effect during the following time periods unless otherwise noted.
 Sun..... 1300–2259 local time.
 Mon thru Fri 0701–2259 local time.
 Sat 0701–1459 local time.
14. Use current SIDs and STARSs for flight planning.
15. For high altitude routes, the portion of the routes contained in brackets [] is suggested but optional. The portion of the route outside the brackets will likely be required by the facilities involved.

LOW ALTITUDE

Terminals	Route	Effective Times (UTC)
SAN FRANCISCO/OAKLAND METRO AREA		
From SAN FRANCISCO Area: West Bay Airports		
Los Angeles Area	(70–90–110–130–150–170) V27 VTU V299 SADDE V107 LAX	1400–0800
From OAKLAND Area: East Bay Airports		
Los Angeles Area	(70–90–110–130–150–170) V109 PXN V113 V485 V299 SADDE V107 LAX	1400–0800

HIGH ALTITUDE

Terminals	Route	Effective Times (UTC)
ALBUQUERQUE (ABQ)		
Chicago O'Hare (ORD)	J18 GCK J96 IRK BDF–STAR	1100–0400
Houston (HOU)	(Turbojets) LLO TEXNN–STAR	
Houston (IAH)	LLO RIICE–STAR	
ASPEN (ASE)		
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR)	OBK CRL HIMEZ–STAR	
BURBANK (BUR)		
Chicago O'Hare (ORD)	(all B747, B767, B727, DC10, DC87, L1011) DAG LAS BCE MTU OCS J94 ONL J148 MCW JVL–STAR	0000–2359
	or	
	(all other jets) DAG EED DRK J96 IRK BDF–STAR	0000–2359
Detroit Metro–Wayne Co (DTW)	[BUR OBH] OBH J100 DBQ BAE MKG POLAR–STAR	
Detroit Metro Area (PTK), (YIP), (ARB) (DET), (CYQG)	[BUR OBH] OBH J100 DBQ BAE MKG LAN SPRTN–STAR	1100–0300
DENVER (DEN)		
Boca Raton (BCT)	[DEN ONL] (Turbojets–GPS or DME/DME–IRU equipped) RZC MEM VUZ MGM SZW PRRIE (RNAV)–STAR	
Boston (BOS)	[DEN ONL] J94 DBQ BAE J16 ALB GDM–STAR	
Chicago O'Hare (ORD)	[DEN ONL] MCW JVL–STAR	
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR)	OBK CRL HIMEZ–STAR	
Dallas/Fort Worth (DFW)	J17 AMA J58 SPS UKW	
Detroit Metro–Wayne Co (DTW)	[DEN OBH] J100 DBQ BAE MKG POLAR–STAR	
Fort Lauderdale (FLL)	(all others) [DEN ICT] RZC VUZ MGM SZW J41 PIE FORTL–STAR	
	or	
	(GPS or DME/DME–IRU equipped) [DEN ICT] RCZ VUZ MGM SZW JINGL (RNAV)–STAR	
Ft Myers (RSW)	TTT J58 HRV Q105 BLVNS Q102 BAGGS TYNEE (RNAV)–STAR	
Houston (HOU)	(Turbojets) PNH MQP ELLVR TEXNN–STAR	
Houston (IAH)	PNH MQP RIICE–STAR	
Kennedy (JFK)	[DEN ONL] J94 OBK J584 CRL J554 JHW J70 LVZ LENDY–STAR	
Miami (MIA)	(all others) [DEN ICT] RZC VUZ MGM SZW J41 PIE CYY–STAR	
	or	
	(Turbojets–GPS or DME/DME–IRU equipped) [DEN ICT] ICT RZC VUZ MGM SZW SSCOT (RNAV)–STAR	
Newark (EWR)	IOW GIJ J554 CRL J584 SLT FQM–STAR	
Orlando Intl (MCO)	[DEN ICT] RZC MEM J41 PIE LAL	1100–0400
	or	
	(GPS or DME/DME–IRU equipped) ICT RZC MEM J41 PIE COSTR (RNAV)–STAR	1100–0400
Palm Beach (PBI)	[DEN ICT] (Turbojets–GPS or DME/DME–IRU equipped) RZC MEM VUZ MGM SZW WLACE (RNAV)–STAR	
	or	
	[DEN ICT] (Turbojets–GPS or DME/DME–IRU equipped) RZC MEM VUZ MGM SZW CTY WLACE (RNAV) –STAR	
Pittsburgh (PIT)	[DEN JOT] JOT J146 J34 DJB V30 ACO V337 CUTTA	1500–0100
Sarasota/Bradenton (SRQ)	DFW J58 COVIA SRQ–STAR	
Tampa (TPA)	[DEN ICT] RZC VUZ MGM SZW DARBS–STAR	
	or	
	[DEN ICT optional] (GPS or DME/DME–IRU equipped) ICT RZC VUZ MGM SZW FOXX (RNAV)–STAR	

Terminals	Route	Effective Times (UTC)
West Palm Beach (PBI)	[DEN ICT] (Turbojets–GPS or DME/DME–IRU equipped) RZC MEM VUZ MGM SZW WLACE (RNAV)–STAR	
	or	
	[DEN ICT] (Turbojets–GPS or DME/DME–IRU equipped) RZC MEM VUZ MGM SZW CTY GULLO (RNAV)–STAR	
FRESNO (FAT)		
Denver	OAL J148 DTA J84 EKR TOMSN–STAR	1400–0000
LAS VEGAS (LAS)		
Chicago O'Hare (ORD)	(FL240 and above, All) BCE MTU OCS J94 ONL J94 DBQ JVL JVL–STAR	0000–2359
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR)	OBK CRL HIMEZ–STAR	
Detriot/Wayne Co (DTW)	BAE MKG POLAR–STAR	
	or	
	PXV VHP FWA MIZAR–STAR	
Houston (HOU)	(Turbojets) LLO TEXNN–STAR	
	or	
	FST SAT LISSE–STAR	
Houston (IAH)	LLO RIICE–STAR	
	or	
	FST SAT GLAND–STAR	
LONG BEACH (LGB)		
Dallas/Fort Worth (DFW)	TRM J169 TFD J50 SSO J4 INK JEN	1400–2300
Detroit Metro–Wayne Co (DTW)	J100 DBQ BAE MKG POLAR–STAR	
Detroit Metro Area (PTK), (YIP), (ARB) (DET), (CYQG)	J100 DBQ BAE MKG LAN SPRTN–STAR	1100–0300
Portland, OR (PDX)	EHF J65 RBL	1300–0600
Seattle/Tacoma (SEA)	EHF CZQ LIN	1300–0500
LOS ANGELES (LAX)		
Boston (BOS)	J9 MLF J107 OCS J94 DBQ BAE J16 ALB GDM–STAR	
	or	
	J9 MLF J107 DDY J158 ABR J70 GEP J106 GRB J38 ECK J16 ALB GDM–STAR	
Chicago O'Hare (ORD)	(all B747, B767, B727, DC10, DC87, L1011) DAG LAS BCE MTU OCS J94 ONL J148 MCW JVL–STAR	1100–0300
	or	
	(all other jets) TRM J78 DRK J96 IRK BDF–STAR	1100–0300
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR)	OBK CRL HIMEZ–STAR	
Detroit Metro–Wayne (DTW)	BAE MKG POLAR–STAR	
	or	
	PXV VHP FWA MIZAR–STAR	
Detroit Metro Area (PTK), (YIP), (ARB) (DET), (CYQG)	J100 DBQ BAE MKG LAN SPRTN–STAR	1100–0300
Houston (HOU)	FST J138 SAT LISSE–STAR	
Houston (IAH)	FST J138 SAT GLAND–STAR	
Kennedy (JFK)	DAG J100 OBK J584 CRL J554 JHW J70 LVZ LENDY–STAR	
	or	
	J146 DVC J197 GLD J146 GIJ J554 JHW J70 LVZ LENDY–STAR	0000–1400
	or	
	DAG J100 OBK J584 CRL J554 JHW J70 LVZ LENDY–STAR	1700–2359
Newark (EWR)	DAG J100 OBH J10 IOW J60 JOT J146 GIJ J554 CRL J584 SLT FQM–STAR	1700–1759 and 2100–2159
Pittsburgh (PIT)	JOT J146 J34 DJB V30 ACO V337 CUTTA	1300–0100
	or	
	J146 DVC J197 GLD J192 IOW J146 J34 DJB V30 ACO V337 CUTTA	
Portland, OR (PDX)	EHF J65 RBL	1300–0600
Seattle/Tacoma (SEA)	EHF CZQ LIN	1300–0500

Terminals	Route	Effective Times (UTC)
MONTEREY (MRY)		
Denver (DEN)	OAL J148 DTA J84 EKR TOMSN–STAR	1400–0000
OAKLAND (OAK)		
Chicago O'Hare (ORD)	(FL240 and above, Jets) to join ONL J94 DBQ JVL JVL–STAR	0000–2359
Denver (DEN)	J84 EKR TOMSN–STAR or	1400–0000
	FMG J94 BAM J154 TCH J56 CHE TOMSN–STAR	1400–0000
Detroit Metro-Wayne Co (DTW)	SAC FMG J94 DBQ BAE MKG POLAR–STAR	
Detroit Metro Area (PTK), (YIP), (ARB) (DET), (CYQG)	SAC FMG J94 DBQ BAE MKG LAN SPRTN–STAR	1400–0400
Houston (HOU)	(Turbojets) PNH MQP ELLVR TEXNN–STAR	
Houston (IAH)	PNH MQP RIICE–STAR	
Newark (EWR)	SAC FMG J94 OBK J584 SLT FQM–STAR or	0000–2359
	FMG J94 OBK J584 CRL J584 SLT FQM–STAR	
Phoenix (PHX)	OAL J92 DRK	1600–0500
ONTARIO (ONT)		
Chicago O'Hare (ORD)	(FL240 and above, All DC8, B747, B767, B727, DC10, L1011) DAG LAS BCE MTU OCS J94 ONL J94 DBQ JVL JVL–STAR or	0000–2359
	(FL240 and above, All others) TRM J78 DRK J96 IRK BDF3	0000–2359
Dallas/Fort Worth (DFW)	TRM J169 TFD J50 SSO J4 INK JEN	1400–2300
Detroit Metro–Wayne Co (DTW)	DAG OBH J100 DBQ BAE MKG POLAR–STAR	
Detroit Metro Area (PTK), (YIP), (ARB) (DET), (CYQG)	OBH J100 DBQ BAE MKG LAN SPRTN–STAR	1100–0300
Houston (HOU)	FST J138 SAT LISSE–STAR	
Houston (IAH)	FST J138 SAT GLAND–STAR	
Kennedy (JFK)	DAG J100 OBK J584 CRL J554 JHW J70 LVZ LENDY–STAR	1400–2200
Pittsburgh (PIT)	DAG J146 DVC J197 GLD J192 IOW J146 J34 DJB V30 ACO V337 CUTTA	1300–0100
Portland (PDX)	EHF J65 RBL	1300–0600
Seattle/Tacoma (SEA)	EHF CZQ LIN	1300–0500
Vancouver (CYVR)	EHF CZQ LIN	1800–2100 and 2330–0200
PALM SPRINGS (PSP)		
Chicago O'Hare (ORD)	(FL240 and above, All DC8, B747, B767, B727, DC10, L1011) join ONL J94 DBQ JVL JVL–STAR or	0000–2359
	(FL240 and above, All others) join DRK J96 IRK J26 BDF V10 PLANO	
PHOENIX (PHX)		
Chicago O'Hare (ORD)	J18 SLN J96 IRK BDF–STAR	0000–2359
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR)	OBK CRL HIMEZ–STAR	
Dallas/Fort Worth (DFW)	CIE J2 ELP J50 INK JEN	1400–2300
Detroit Metro–Wayne (DTW)	BAE MKG POLAR–STAR or	
	PXV VHP FWA MIZAR–STAR	
Detroit Metro Area (PTK), (YIP), (ARB) (DET), (CYQG)	PAYSO GUP J102 ALS J13 FQF J128 DBQ BAE MKG LAN SPRTN–STAR	1100–0300
Houston (HOU)	FST J138 SAT LISSE–STAR	
Houston (IAH)	FST J138 SAT GLAND–STAR	
Kennedy (JFK)	J18 GCK HYS PWE J192 IOW J60 JOT J146 GIJ J554 JHW J70 LVZ LENDY–STAR or	0000–1429
	GUP J102 ALS PUB GLD J146 GIJ J554 JHW J70 LVZ LENDY–STAR or	0000–1429
	GUP J102 ALS PUB GLD J197 OBH J100 OBK J584 CRL J554 JHW J70 LVZ LENDY–STAR	1430–2359

Terminals	Route	Effective Times (UTC)
Newark (EWR)	J18 GCK HYS PWE J192 IOW J60 JOT J146 GIJ J554 CRL J584 FQM–STAR	
	or	
	GUP J102 ALS PUB GLD J146 GIJ J554 CRL J584 FQM–STAR	0000–1459
Oakland (OAK)	J92 OAL ECA V195	1600–0500
San Francisco (SFO)	J92 OAL MOD	1600–0500
San Jose (SJC)	J92 OAL HYP	1600–0500
RENO (RNO)		
Chicago O'Hare (ORD)	J32 CZI J82 FSD J16 MCW JVL–STAR	0000–2359
Denver (DEN)	MVA EKR TOMSN–STAR	1400–0000
	or	
	FMG J94 BAM J154 TCH J56 CHE TOMSN–STAR	1400–0000
SACRAMENTO (SAC)		
Chicago O'Hare (ORD)	(FL240 and above, Jets) to join ONL J94 DBQ JVL JVL–STAR	0000–2359
Denver (DEN)	J84 EKR TOMSN–STAR	1400–0000
	or	
	FMG J94 BAM J154 TCH J56 CHE TOMSN–STAR	1400–0000
Phoenix (PHX)	OAL J92 DRK	
SALT LAKE CITY (SLC)		
Boston (BOS)	TCH MCW J16 ECK BUF J16 ALB GDM GDM–STAR	
	or	
	OCS J107 DDY J158 ABR J70 GEP J106 GRB J38 ECK J16 ALB GDM–STAR	
	or	
	OCS J94 DBQ BAE J16 ALB GDM–STAR	
Chicago O'Hare (ORD)	(FL240 and above, All) OCS J94 ONL J94 DBQ JVL JVL–STAR	0000–2359
Houston (HOU)	(Turbojets) PNH MQP ELLVR TEXNN–STAR	
Houston (IAH)	PNH MQP RIICE–STAR	
Kennedy (JFK)	OCS J94 OBK J584 CRL J554 JHW J70 LVZ LENDY–STAR	0700–2359
SAN DIEGO (SAN)		
Chicago O'Hare (ORD)	IPL J18 SLN J96 IRK BDF–STAR	0000–2359
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR)	OBK CRL HIMEZ–STAR	
Dallas/Fort Worth (DFW)	IPL J18 GBN J50 SSO J4 INK JEN	1400–2300
Detroit/Wayne (DFW)	BAE MKG POLAR–STAR	
	or	
	PXV VHP FWA MIZAR–STAR	
Houston (HOU)	FST J138 SAT LISSE–STAR	
Houston (IAH)	FST J138 SAT GLAND–STAR	
Kennedy (JFK)	IPL J18 PXR J102 ALS PUB GLD J197 OBH J100 OBK J584 CRL J554 JHW J70 LVZ LENDY–STAR	1430–2359
Pittsburgh (PIT)	JOT J146 J34 DJB V30 ACO V337 CUTTA	1300–0100
	or	
	DVC J197 GLD J192 IOW J146 J34 DJB V30 ACO V337 CUTTA	
Portland (PDX)	EHF J65 RBL J1	1300–0600
Seattle/Tacoma (SEA)	EHF CZQ LIN J189 BTG OLM–STAR	1300–0500
Vancouver (CYVR)	EHF CZQ LIN J189 LMT J65 SEA PAE ACORD–STAR	1800–2100 and 2330–0200
SAN FRANCISCO (SFO)		
Boston (BOS)	FMG J94 DBQ BAE J16 ALB GDM–STAR	
Chicago O'Hare (ORD)	FMG J32 CZI J82 FSD J16 MCW JVL–STAR	1500–0400
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR)	OBK CRL HIMEZ–STAR	
Denver (DEN)	J84 EKR TOMSN–STAR	1400–0000
	or	
	FMG J94 BAM J154 TCH J56 CHE TOMSN–STAR	1400–0000
Detroit Metro–Wayne (DTW)	PXV VHP FWA MIZAR–STAR	
	or	
	BAE MKG POLAR–STAR	

Terminals	Route	Effective Times (UTC)
Detroit Metro Area (PTK), (YIP), (ARB) (DET), (CYQG)	SAC FMG J94 DBQ BAE MKG LAN SPRTN–STAR	1400–0400
Houston (HOU)	(Turbojets) PNH MQP ELLVR TEXNN–STAR	
Houston (IAH)	PNH MQP RIICE–STAR	
Kennedy (JFK)	FMG J94 OBK J584 CRL J554 JHW J70 LVZ LENDY–STAR	0000–2359
Newark (EWR)	FMG J94 OBK J584 SLT FQM–STAR	0000–2359
Phoenix (PHX)	OAL J92 DRK	1600–0500
Pittsburgh (PIT)	FMG J94 BFF OBH DSM IOW J60 JOT J146 J34 DJB V30 ACO V337 CUTTA	1300–0100
Toronto (CYYZ)	FMG J32 ABR J70 GEP J106 GRB J38 ECK YWT–STAR	
SAN JOSE (SJC)		
Chicago O'Hare (ORD)	(FL240 and above, All) J32 BAM J94 DBQ JVL JVL–STAR	0000–2359
Denver (DEN)	J84 EKR TOMSN–STAR	1400–0000
Houston (HOU)	(Turbojets) LLO TEXNN–STAR	
Houston (IAH)	LLO RIICE–STAR	
Phoenix (PHX)	OAL J92 DRK	1600–0500
SANTA ANA (SNA)		
Chicago O'Hare (ORD)	TRM J78 DRK J96 IRK J26 BDF V10 PLANO	
Dallas/Fort Worth (DFW)	TRM J169 TFD J50 SSO J4 INK JEN	1400–2300
Detroit Metro–Wayne Co (DTW)	TRM PKE J96 DRK FLG J10 FQF J128 DBQ BAE MKG POLAR–STAR	1100–0300
Portland (PDX)	EHF J65 RBL J1 OED	1300–0600
Seattle/Tacoma (SEA)	EHF CZQ LIN J189 LMT	1300–0500
TUCSON (TUS)		
Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR)	OBK CRL HIMEZ–STAR	
Houston (HOU)	FST J138 SAT LISSE–STAR	
Houston (IAH)	FST J138 SAT GLAND–STAR	

SPECIAL HIGH ALTITUDE ARRIVAL ROUTES FOR DENVER TERMINAL AREA

SOUTHEAST	
Denver	over LAA QUAIL–STAR
SOUTH	
Denver	over TBE J171 TODDE QUAIL–STAR
	over ALS LARKS–STAR
	over HBU POWDR–STAR
SOUTHWEST	
Denver	over DVC J146 HBU POWDR–STAR
	over TBC ABOTS LARKS–STAR or
	over TBC J128 HBU POWDR–STAR
	over FMN LARKS–STAR
	over ALS LARKS–STAR
WEST	
Denver	over EKR TOMSN–STAR
	over TCH J56 CHE TOMSN–STAR
	over OCS J154 ALPOE RAMMS–STAR
NORTHWEST	
Denver	over MBW RAMMS–STAR
NORTH	
Denver	over BFF LANDR–STAR
NORTHEAST	
Denver	over ONL J114 SNY LANDR–STAR
	over OBH J10 LBF SAYGE–STAR
EAST	
Denver	over OBH J10 LBF SAYGE–STAR
	over GCK J154 RYLIE DANDD–STAR

SPECIAL HIGH ALTITUDE ARRIVAL ROUTES FOR SALT LAKE CITY TERMINAL AREA

SOUTHEAST
Salt Lake City over JNC J12 HELPR SPANE–STAR.....
..... over EKR MTU SPANE–STAR

SOUTH
Salt Lake City over BCE DTA–TCH
..... over MLF DTA–TCH

WEST
Salt Lake City over BVL BVL–STAR.....

NORTHWEST
Salt Lake City over BYI BEARR–STAR.....

NORTH
Salt Lake City over PIH BEARR–STAR
..... over DBS BRIGHAM CITY–STAR

NORTHEAST
Salt Lake City over JAC BRIGHAM CITY–STAR

EAST
Salt Lake City over OCS BRIGHAM CITY–STAR

SPECIAL HIGH ALTITUDE DIRECTIONAL ROUTES

Terminals	Route	Effective Times (UTC)
Traffic overflying Salt Lake Center, westbound south of a line from Rock Springs VORTAC (OCS) to Mina VORTAC (MVA):		
Salt Lake City (ZLC).....	TATOO DOUGLE MADWIN–STAR..... or RUMPS OAL MODESTO–STAR or TPH CANDA HYPER (RNAV)–STAR	
Traffic overflying Salt Lake Center, westbound north of a line from Rock Springs VORTAC (OCS) to Mina VORTAC (MVA):		
Salt Lake City (ZLC).....	FMG RAIDR (RNAV)–STAR or FMG ILA PYE GOLDEN GATE–STAR..... or FMG HYPER (RNAV)–STAR	
Transcon flights overflying Salt Lake City Center, westbound south of Wasatch VORTAC (TCH):		
Salt Lake City (ZLC).....	DTA TATOO DUGLE MADWIN–STAR	
Salt Lake City (ZLC).....	DTA RUMPS OAL MODESTO–STAR	
Salt Lake City (ZLC).....	ILC TATOO DUGLE MADWIN–STAR	
Salt Lake City (ZLC).....	ILC RUMPS OAL MODESTO–STAR	
Transcon flights overflying Salt Lake City Center, westbound Wasatch VORTAC (TCH) or north of (TCH):		
Salt Lake City (ZLC).....	FMG RAIDR (RNAV)–STAR	
Salt Lake City (ZLC).....	FMG ILA PYE GOLDEN GATE–STAR.....	
Traffic departing Salt Lake City Center, westbound south of Wasatch VORTAC (TCH):		
Salt Lake City (ZLC).....	TPH CANDA EL NIDO–STAR.....	
Traffic departing Salt Lake City Center, westbound from or north of Wasatch VORTAC (TCH):		
Salt Lake City (ZLC).....	FMG EL NIDO–STAR.....	

HIGH ALTITUDE—SINGLE DIRECTION ROUTES

Airway	Segment Fixes	Direction Effective	Effective Times (UTC)
J110	Farmington, NM to Boulder City, NV.....	West	1500–0300

Q-ROUTES REGULATORY

Q1, Q3, Q5, Q7, Q9 and Q11 are preferred single direction (Southbound) Q routes; flight planning Northbound not authorized.

Q routes are RNAV routes that require the use of GNSS or DME/DME/IRU RNAV, unless otherwise indicated. Please note that this section does not apply to Q routes in the Gulf of Mexico. Gulf of Mexico Q routes are explained in the Southeast and South Central A/FD volumes. Q routes listed in this A/FD volume have at least part of one of their leg segments within this volume's area of coverage.

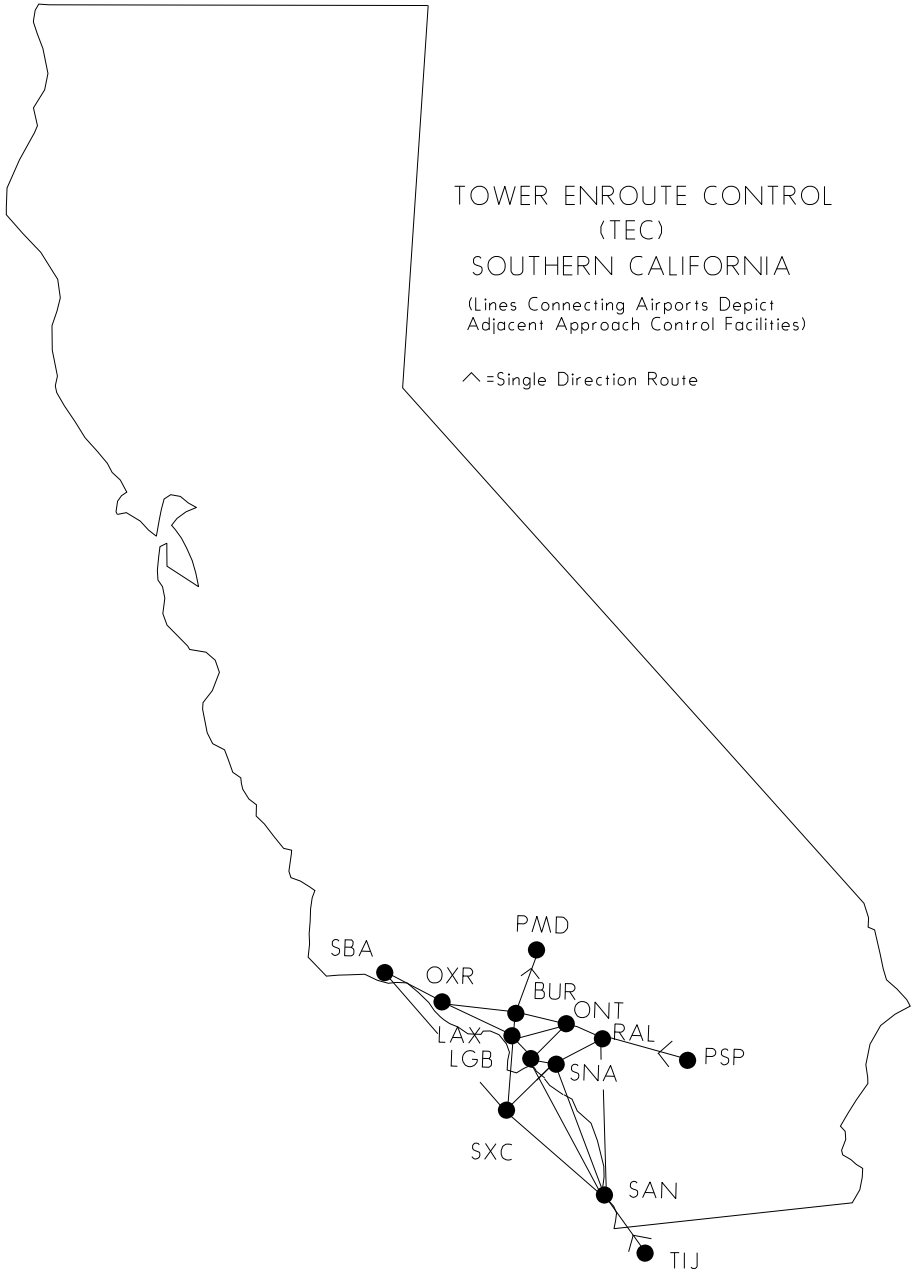
GNSS and DME/DME/IRU RNAV operations are authorized along Q routes at FL 180 and above. GNSS and DME/DME/IRU RNAV MEAs will only be published if above FL 180.

DME facilities that have been assessed for RNAV operations are listed below. Q routes with no DME facilities listed are limited to GNSS RNAV operations only. Those routes will have an enroute chart note ''GNSS REQUIRED''.

Route	Segment	DME
Q1	ELMAA–ERAVE	BTG, OLM, HQM, HUH, UBG
	ERAVE–EASON	BTG, OLM, HQM, HUH, LTJ, CVO, DSD, OED, UBG, ONP, EUG
	EASON–EBINY	CVO, DSD, OED, BTG, UBG, ONP, EUG, LMT
	EBINY–ENVIE	CVO, OED, EUG, LMT, RBL, ENI, ONP, FJS
	ENVIE–ETCHY	OED, PYE, OAK, LIN, ECA, LMT, RBL, ENI, SAC, FJS
	ETCHY–POINT REYES	LIN, ECA, RBL, ENI, SAC, OAK
Q2	BOILE–HEDVI	HEC, PDZ, OCN, PMD, LAX, RZS, IPL, TRM, PKE, BLH, EED, BZA, GBN, PXR
	HEDVI–HOBOL	BZA, GBN, BLH, EED, PXR, IPL, TFD, DRK, TUS
	HOBOL–ITUCO	TFD, GBN, BLH, PXR, TUS, CIE, SSO
	ITUCO–NEWMAN	EWM, TFD, PXR, CIE, SSO, TUS, TCS
Q3	FEPOT–FAMUK	OLM, TOU, HQM, CVO, BTG, DSD, LTJ, UBG, ONP, EUG
	FAMUK–FRFLY	BTG, DSD, OED, CVO, EUG, ONP, UBG, RBL, LMT
	FRFLY–FINER	OED, EUG, RBL, LMT, ENI, CVO, FJS
	FINER–FOWND	OED, PYE, ECA, LIN, OAK, ENI, RBL, LMT, SAC, FJS
	FOWND–POINT REYES	LIN, ECA, PYE, RBL, SAC, ENI
Q4	BOILE–HEDVI	HEC, PDZ, OCN, PMD, LAX, RZS, IPL, TRM, PKE, BLH, EED, BZA, GBN, PXR
	HEDVI–SCOLE	EED, BLH, BZA, GBN, TRM, IPL, TFD
	SCOLE–SPTFR	EED, BLH, BZA, GBN, TRM, IPL, TFD
	SPTFR–ZEBOL	EED, IPL, BZA, GBN, TFD, PXR, BLH
	ZEBOL–SKTTR	PXR, BLH, BZA, GBN, TFD, TUS, SSO, CIE, SVC, TCS
	SKTTR–EL PASO	EWM, CUS, SVC, TCS, SSO, CIE, ELP, DMN, CME
Q5	HAROB–HISKU	OLM, ONP, CVO, EUG, HQM, UBG, BTG, LTJ, DSD, HUH
	HISKU–HARPR	ONP, CVO, EUG, LTJ, DSD, UBG, BTG, RBL, OED, LMT, FJS, LKV
	HARPR–HOMEG	CVO, EUG, OED, RBL, LMT, ENI, FJS, LKV
	HOMEG–HUPTU	SAC, PYE, LIN, OAK, ECA, LMT, RBL, ENI, OED, FJS
	HUPTU–STIKM	OAK, ECA, PYE, LIN, SAC, ENI, RBL
Q7	JINMO–JOGEN	CVO, HQM, LTJ, UBG, BTG, ONP, IMB, EUG, OLM, DSD, YKM, PDT, SEA
	JOGEN–JUNEJ	LTJ, IMB, UBG, EUG, CVO, RBL, LMT, FMG, DSD, LKV, OED, BTG
	JUNEJ–JAGWA	RBL, LMT, FMG, LIN, SAC, ECA, ENI, MOD, SWR, OAK, LKV, CZQ, AVE, SNS
	JAGWA–AVENAL	OAK, MOD, ECA, EHF, PRB, AVE, SNS, CZQ
Q9	SUMMA–SMIGE	OLM, UBG, SEA, YKM, BTG, ONP, IMB, HQM, PDT, EUG, LTJ, CVO, DSD, OED, EPH, MWH
	SMIGE–SUNBE	IMB, UBG, EUG, IMB, RBL, LMT, FMG, SAC, OED, CVO, LKV, DSD, BTG
	SUNBE–REBRG	RBL, LMT, FMG, SAC, ECA, MVA, CZQ, OAK, EHF, PMD, LKV, LIN, MOD, AVE, OED, SWR
	REBRG–DERBB	CZQ, PMD, EHF, LAX, RZS, AVE, MOD, ECA
Q11	PAAGE–PAWLI	EPH, UBG, CVO, EUG, HQM, YKM, OLM, PDT, BTG, ONP, IMB, LTJ, DSD, LKV, OED, SEA
	PAWLI–PITVE	EUG, FMG, SAC, IMB, LKV, OED, DSD, RBL, LMT, CVO, REO
	PITVE–PUSHH	FMG, SAC, LIN, SWR, MOD, OAL, RBL, LKV, LMT, MVA, CZQ
	PUSHH–LOS ANGELES	SAC, ECA, FMG, LIN, OAL, MOD, EHF, LAX, PMD, PDZ, HEC, OCN, CZQ, AVE, RZS
Q13	All segments	None; GNSS required
Q15	All segments	None; GNSS required
Q19	PLESS–NASHVILLE	ENL, GQO, PXV, BNA, IIU, FAM, BWG, CSX
Q20	CORONA–HONDS	CNX, ABQ, ACH, ONM, TXO, LVS, TCC, CME
	HONDS–UNNOS	CNX, INK, CME, TXO, TCC
	UNNOS–FUSCO	FST, ACH, INK, CME, SJT, TXO, TCC
	FUSCO–JUNCTION	ABI, CWK, CSI, INK, LZZ, JCT, SJT, STV, FST
Q21	JONEZ–RAZORBACK	BYP, EOS, TUL, TXK, ADM, RZC, OKM
Q22	GUSTI–OYSTY	AEX, DAS, MCB, LLA, BTR, LCH, HRV, LFT, LEV
	OYSTY–ACMES	RQR, GCV, MCB, BTR, PCU, GPT, HRV, LEV, SJI
	ACMES–CATLN	SJI, MGM, MCB, BFM, GPT, GCV, HRV, CEW, MVC, PCU, MEI
Q23	FORT SMITH–RAZORBACK	OKM, RZC, EOS, TUL

Route	Segment	DME
Q24	LAKE CHARLES–BATON ROUGE	AEX, DAS, LCH, MCB, LFT, BTR
	BATON ROUGE–IRUBE	AEX, LEV, MCB, LCH, RQR, HRV, BTR, GCV, MCB, PCU, SJI, LBY
	IRUBE–PAYTN	GCV, MCB, JYU, PCU, MEI, HRV, CEW, SJI
Q25	MEEOW–WALNUT RIDGE	ELD, MEM, LIT, FAM, RZC
	WALNUT RIDGE–WLSUN	MEM, STL, BWG, PXV, ENL, FAM, ARG, BNA, CSX, TTH
	WLSUN–POCKET CITY	BWG, PXV, ENL, BNA, TTH
Q26	WALNUT RIDGE–DEVAC	LIT, JKS,GQO, MEM, BNA, FAM, ARG, DYR, VUZ, RMG
Q27	FORT SMITH–ZALDA	OKM, SGF, RZC, EOS, TUL
Q28	GRAZN–PYRMD	EIC, LIT, ELD, OKM, TXK
	PYRMD–HAKAT	ARG, LIT, FAM, ELD, SGF, RZC, MEM, TXK
	HAKAT–ESTEE	ARG, LIT, FAM, SGF, MEM
	ESTEE–POCKET CITY	ARG, CSX, FAM, PXV, ENL, MEM, STL, BWG, TTH, BNA
Q29	HARES–MEMPHIS	MEM, ARG, LIT, JAN, ELD, SQS
	MEMPHIS–SIDAE	MEM, PXV, BNA, BWG, ARG, ENL
	SIDAE–POCKET CITY	PXV, TTH, BWG, ENL
Q30	SIDON–VULCAN	GLH, MEM, VUZ, JAN, JYU, MEI, MGM, SQS, RMG
Q31	DHART–JODOX	SQS, LIT, TXK
	JODOX–MARVELL	SQS, LIT, ELD, MEM, ARG
	MARVELL–TIIDE	ARG, BWG, PXV, FAM, LIT, MEM, ENL, TTH
	TIIDE–POCKET CITY	BWG, PXV, ENL, TTH
Q32	EL DORADO–GAGLE	AEX, JAN, MEM, SQS, SWB, ELD, LIT, TXK
	GAGLE–CRAMM	JAN, SQS, MEM, ARG, VUZ, BNA, LIT
	CRAMM–NASHVILLE	BWG, MEM, VUZ, BNA, GQO
	NASHVILLE–SWAPP	BWG, IIU, PXV, VXV, BNA, GQO
Q33	DHART-LITTLE ROCK	AEX, ELD, LIT, TXK, SWB, ARG, MEM, SQS
	LITTLE ROCK–PROWL	ELD, SGF, FAM, LIT, ARG, MEM, RZC, CSX, STL
Q34	TEXARKANA–MATIE	LIT, SWB, TXK, BYP, EIC, ELD, SQS
	MATIE–MEMPHIS	LIT, ARG, MEM, ELD, SQS
	MEMPHIS–SWAPP	BWG, ARG, MEM, MKL, SQS,PXV, BNA, GQO, IIU, VXV
Q35	KIMBERLY–NEERO	LTJ, PDT, DSD, IMB, LKV, BOI, REO, BAM, SDO
	NEERO–WINEN	BQU, SDO, BAM, REO, BVL, ILC, DTA, ELY, CDC, MLF, BCE
	WINEN–CORKR	CDC, BCE, BLD, ILC, MLF, TBC, PGS, INW, DRK
	CORKR–DRAKE	TBC, BCE, BLD, DRK, PGS, FLG, GCN, INW, TFD
Q36	RAZORBACK–TWITS	RZC, MEM, SGF, BUM, TUL, EOS, FAM, ARG, LIT
	TWITS–DEPEC	MEM, GQO, BNA, BWG, FAM, ARG, PXV, IIU
	DEPEC–NASHVILLE	GQO, BWG, BNA, PXV, IIU
	NASHVILLE–SWAPP	VXV, BWG, BNA, GQO, PXV, IIU
Q38	ROKIT–INCIN	DAS, LCH, SWB, IAH, LFK, HUB, AEX
	INCIN–LAREY	JAN, MCB, SWB, AEX
	LAREY–BESOM	JAN, JYU, MEI, SQS, VUZ
Q40	ALEXANDRIA–DOOMS	AEX, SWB, LCH, JAN, HEZ, MCB
	DOOMS–WINAP	JAN, SQS, MEI, MCB
	WINAP–MISLE	MEI, VUZ, JYU
Q42	KIRKSVILLE–STRUK	CID, IOW, UIN, LMN, IRK, BDF, STL, DEC, ENL, CSX
	STRUK–DANVILLE	ENL, IOW, UIN, BDF, DEC, STL, CSX, SPI, TTH, BVT, JOT, VHP, OXI, ENL, OKK, OBK, GIJ, FWA, GSH, IRK
	DANVILLE–MUNCIE	GIJ, SPI, BDF, OBK, OKK, VHP, BVT, DEC, GSH, FWA, JOT, TTH, OXI, ROD, FLM
	MUNCIE–HIDON	FLM, VHP, GSH, TTH, GIJ, OKK, FWA, ROD, OXI, CRL, GSH, APE, DJB, DXO, HNN, AIR, HVQ, CXR, EWC
	HIDON–BUBAA	AIR, APE, HNN, CXR, HVQ, EWC, DJB
	BUBAA–PSYKO	AIR, APE, DJB, CXR, HNN, EWC, SLT, CSN, JHW, ETG, PSB
	PSYKO–BRNAN	PSB, JHW, EWC, AIR, ETG, CSN, EMI, SLT
	BRNAN–MAALS	EMI, SLT, CSN, EWC, PSB, ETG, SAX, RBV, HNK, HUO, SIE
	MAALS–SUZIE	ETG, EMI, CSN, HUO, SIE, JFK, PSB, SLT, HNK
	SUZIE–EAST TEXAS	JFK, EMI, PSB, SLT, HNK, SIE, RBV, SAX, HUO, CYN
	EAST TEXAS–ELIOT	HUO, RBV, EMI, CYN, SAX, JFK, PSB, HNK
Q104	DEFUN–HEVVN	PIE, PZD, CRG, SZW, TAY, JYU, CEW, MGM, OTK, CRG
	HEVVN–PLYER	PIE, ORL, OMN, SRQ, TAY, LAL, CRG, SZW, PZD
	PLYER–SWABE	PIE, ORL, OMN, SRQ, TAY
	SWABE–ST PETERSBURG	LAL, ORL, OMN, SRQ, PHK, PIE
	ST PETERSBURG–CYPRESS	PHK, PBI, SRQ, PIE, VRB, ORL, FLL, LAL, OMN

Route	Segment	DME
Q106	SMELZ–BULZI	LAL, ORL, OMN, PHK, PIE, CRG, VRB, TAY, OTK, PZD, AMG, SZW
	BULZI–DRABK	AMG, PZD, TAY, CRG, SZW, MGM, OTK, JYU, CEW, SJI
	DRABK–GADAY	MGM, PZD, OTK, JYU, SZW, CEW, SJI
Q108	GADAY–HKUNA	CEW, JYU, MGM, SZW, RRS, PZD, MAI, OTK, GEF, MGR, TAY, AMG, CRG
Q110	THNDR–JAYMC	SRQ, VRB, PIE, LAL, VKZ, ORL, PBI
	JAYMC–RVERO	VKZ, VRB, PHK, PIE, LAL, SRQ, ORL, OMN, PBI, DHP
	RVERO–KPASA	OMN, PIE, PBI, SRQ, ORL, LAL
	KPASA–BRUTS	SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG
	BRUTS–GULFR	OMN, AMG, CRG, SZW, PIE, TAY, PZD, OTK
	GULFR–FEONA	TAY, MCN, PZD, CRG, OTK, SZW, AMG, MCN, ATL, MGM
Q112	DEFUN–HEVVN	PIE, OTK, CRG, OMN, LAL, SZW, SRQ, ORL, VRB
	HEVVN–INPIN	JYU, PZD, CEW, SZW, MGM, OTK, TAY, AMG, PIE, CRG
Q116	KPASA–BRUTS	SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG
	BRUTS–GULFR	OMN, AMG, CRG, TAY, LAL, PZD, SZW, OTK
	GULFR–CEEYA	MCN, AMG, PZD, OTK, SZW, TAY
Q118	KPASA–BRUTS	SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG
	BRUTS–LENIE	OMN, AMG, CRG, TAY, LAL, PZD, SZW, OTK, MCN
Q501	VIXIS–GOPHER	ECK, FNT, APN, SSM, GRR, MBL, SAW, BAE, MNM, DLL, AUW, ODI, STE, FGT,EAU, DLH, GEP, BRD, MCW, MSP, ASP, TVC, GRB, RWF
	GOPHER–SOBME	FGT, BRD, MCW, GEP, ABR, FAR, DLH, ODI, RWF, FSD
Q502	KENPA–GOPHER	SSM, FNT, ECK, APN, SAW, GRB, BAE, DLL, AUW, ODI, FGT, DLH, EAU, MCW, MSP, MNM, ASP, TVC, GEP, RWF, BRD
	GOPHER–SOBME	FGT, DLH, ODI, MCW, ABR, FAR, MSP, GEP, RWF, FSD, BRD
Q504	NOTAP–CESNA	SSM, ECK, APN, GLR, PLN, ISQ, MNM, DLL, RHI, DLH, GEP, FGT, ODI, ASP, TVC, SAW, GRB, BRD
	CESNA–HEMDI	ODI, GEP, DLH, FGT, RWF, FAR, AXN, FSD, ABR, DLL, BRD
Q505	OMAGA–RIMBE	SSM, TVC, ASP, SAW, GRB
	RIMBE–CESNA	SSM, RHI, DLL, DLH, GEP, FGT, TVC, SAW, GRB, BRD, ODI
	CESNA–HEMDI	GEP, DLH, FGT, RWF, FAR, AXN, FSD, ABR, BRD, ODI, GRB


TOWER ENROUTE CONTROL
(TEC)
SOUTHERN CALIFORNIA
(Lines Connecting Airports Depict
Adjacent Approach Control Facilities)
=Single Direction Route
PMD
SBA
OXR
BUR
ONT
LAX
RAL
LGB
PSP
SNA
SXC
SAN
TIJ

(TEC)

Within the national airspace system it is possible for a pilot to fly IFR from one point to another without leaving approach control airspace. This is referred to as ''Tower Enroute'' which allows flight beneath the enroute structure. The tower enroute concept has been expanded (where practical) by reallocating airspace vertically/geographically to allow flight planning between city pairs while remaining within approach control airspace. Pilots are encouraged to use the TEC route descriptions provided in the Southwest U.S. Airport/Facility Directory when filing flight plans. Other airways which appear to be more direct between two points may take the aircraft out of approach control airspace thereby resulting in additional delays or other complications. All published TEC routes are designed to avoid enroute airspace and the majority are within radar coverage. The following items should be noted before using the graphics and route descriptions.

1. The graphic is not to be used for navigation nor detailed flight planning. Not all city pairs are depicted. It is intended to show geographic areas connected by tower enroute control. Pilots should refer to route descriptions for specific flight planning.

2. The route description contains four columns of information after geographic area listed in the heading, where the departure airport is located; i.e., the airport/airports of intended landing using FAA three letter/letter–two number identifiers, the coded route number (this should be used when filing the flight plan and will be used by ATC in lieu of reading out the full route description), the specific route (airway, radial, etc.), the altitude allowed for type of aircraft and the routes.

3. The word ''DIRECT'' will appear as the route when radar vectors will be used or no airway exists. Also this indicates that a Standard Instrument Departure (SID) or Standard Terminal Arrival (STAR) may be applied by ATC.

4. When a NAVAID or intersection identifier appears with no airway immediately preceding or following the identifier, the routing is understood to be DIRECT to or from that point unless otherwise cleared by ATC or radials are listed (See item 5).

5. Routes beginning and ending with an airway indicate that the airway essentially overflies the airport or radar vectors will be applied.

6. Where more than one route is listed to the same destination, ensure you file correct route for type of aircraft which is denoted after the route in the altitude column using J,M,P, or Q. These are listed after item 10 under Aircraft Classification.

7. Although all airports are not listed under the destination column, IFR flight may be planned to satellite airports in the proximity of major airports via the same routing.

8. Los Angeles International Airport (LAX) and four other airports (ONT–SAN–TOA–SNA) have two options due to winds and these affect the traffic flows and runways in use. To indicate the difference the following symbols are used after the airport: Runway Number, W for west indicating normal conditions, E for East, and N for North indicating other than normal operation. If nothing follows the airport use this route on either West, East, or North plan. Other destinations have different arrivals due to LAX being East and they have the notation ''(LAXE).'' Torrance Airport is also unique in that the airport is shared between Los Angeles and Coast area of Southern California TRACON; for Runway 11 departures use Coast area routings and for Runway 29 departures use Los Angeles area routings.

9. When filing flight plans, the coded route identifier, i.e. SANL2, VTUL4, POML3 may be used in lieu of the route of flight.

10. Aircraft types i.e. J, M, P, and Q are listed at the beginning of the altitude and should be used with the route of flight filed. (See Aircraft Classification below). The altitudes shown are to be used for the route. This allows for separation of various arrival routes, departure routes, and overflights to, from, and over all airports in the Southern California area.

LEGENDS

AIRCRAFT CLASSIFICATION

(J) = Jet powered
(M) = Turbo Props/Special (cruise speed 190 knots or greater)
(P) = Non-jet (cruise speed 190 knots or greater)
(Q) = Non-jet (cruise speed 189 knots or less)

BURBANK AREA

FROM: BUR VNY WHP

TO:	ROUTE ID	ROUTE	ALTITUDE
HHR	BURN1	V186 ADAMM V394 HHR RY25 LOC	PQ50
HHR	BURN2	V186 V264 POM V394 HHR RY25 LOC	JM70
HHR (LAXE)	BURN3	VNY095R ELMOO	JMPQ50
LAX	BURN4	VNY095R PURMS	JMPQ50
LAX (LAXE)	BURN5	VNY SMO	JM50PQ40
SMO	BURN6	VNY095R DARTS	JMPQ50
CCB	BURN7	V186 V264 POM	JM70PQ50
CNO EMT REI L65 AJO ONT POC RAL RIR RIV SBD	BURN8	V186 PDZ	PQ50
CNO EMT REI L65 AJO ONT POC RAL RIR RIV SBD	BURN9	V186 V264 POM V197 PDZ	JM70
HMT	BURN10	V186 PDZ V186 WESIN	PQ50
HMT	BURN11	V186 V264 POM V197 PDZ V186 WESIN	JM70
L67	BURN12	V186 PDZ PDZ078R EDITS	PQ50
L67	BURN13	V186 V264 POM V197 PDZ PDZ078R EDITS	JM70
F70	BURN14	V186 PDZ V186 NIKKL	PQ50
F70	BURN15	V186 V264 POM V197 PDZ V186 NIKKL	JM70
AVX	BURN16	V186 BAYJY V363 DANAH SXC065R SXC	PQ50
AVX	BURN17	TWINE V518 KIMMO V459 SLI V21 SXC	JM90
AVX (LAXE)	BURN18	V186 BAYJY V363 DANAH SXC065R SXC	JM50
LGB FUL SLI TOA	BURN19	V186 ADAMM V394 SLI	PQ50
SNA	BURN20	V186 BAYJY V363 POXKU V8 SLI	PQ50
LGB SNA FUL SLI TOA	BURN21	TWINE V518 KIMMO V459 SLI	JM90
FUL SLI TOA (LAXE)	BURN22	V186 ADAMM V394 SLI	JM50
SNA (LAXE)	BURN23	V186 BAYJY V363 POXKU V8 SLI	JM50
LGB (LAXE)	BURN24	V186 ADAMM V394 SLI	M50
LGB (LAXE)	BURN25	V186 BAYJY V363 DANAH V23 SLI	J70
CRQ NFG NKX OKB	BURN26	V186 ROBNN V458 OCN	PQ70
CRQ NFG NKX OKB	BURN27	TWINE V518 KIMMO V459 SLI V23 OCN	JM90
CRQ NFG NKX OKB (LAXE)	BURN28	V186 BAYJY V363 DANAH V23 OCN	JM70
MYF NRS NZY SAN SDM SEE	BURN29	V186 HAILE V66 MZB	PQ90
MYF NRS NZY SAN SDM SEE	BURN30A	TWINE V518 KIMMO V459 SLI V23 KELPS MZB	M90
MYF NRS NZY SAN SDM SEE	BURN30B	TWINE V518 KIMMO V459 SLI SLI171 LAX118 CARDI MZB320 MZB	J110
MYF NRS NZY SAN SDM SEE (LAXE)	BURN31	V186 BAYJY V363 DANAH V23 KELPS MZB	J110M90
SAN (SANE)	BURN32	V186 BAYJY V363 DANAH V165 SARGS	PQ50
SAN (SANE)	BURN33	TWINE V518 KIMMO V459 SLI V165 SARGS	J110M90
SAN (SANE) (LAXE)	BURN34	V186 POM164R V25 REDIN V165 SARGS	JM70
RNM	BURN35	V186 ROBNN V208 JLI	PQ70
RNM	BURN36	TWINE V518 KIMMO V459 SLI V23 OCN V208 JLI	JM90
RNM (LAXE)	BURN37	V186 BAYJY V363 DANAH V23 OCN V208 JLI	JM70
OXR CMA NTD	BURN38	FIM	JMPQ40
SBA	BURN39	FIM V186 DEANO V27 KWANG	JMPQ60

COAST AREA

FROM: FUL LGB SLI SNA TOA (RWY11)

TO:	ROUTE ID	ROUTE	ALTITUDE
BUR	CSTN1	SLI V23 POPPR SMO125R SMO SMO311R SILEX	PQ40
BUR	CSTN2	SLI V23 LAX LAX316R SILEX	JM60
WHP VNY	CSTN3	SLI V23 POPPR SMO125R SMO SMO317R CANOG	PQ40
WHP VNY	CSTN4	SLI V23 LAX LAX320R CANOG	JM60
BUR VNY WHP (LAXE)	CSTN5	SLI SLI333R V186 VNY	JMPQ60
HHR	CSTN6	SLI SLI340R WELLZ HHR RY25 LOC	JM70PQ40

TO:	ROUTE ID	ROUTE	ALTITUDE
LAX	CSTN7	SLI	JM70PQ40
LAX (LAXE)	CSTN8	SLI V8 TANDY	JM50PQ40
SMO	CSTN9	SLI V23 POPPR SMO125R SMO SMO059R ELMOO	PQ40
SMO	CSTN10	SLI V459 DARTS	JM80
SMO (LAXE)	CSTN11	SLI SLI333R V186 DARTS	JMPQ60
CCB EMT POC	CSTN12	SLI V8 POXKU V363 POM	JMPQ50
CNO REI L65 AJO ONT RAL RIR RIV SBD	CSTN13	SLI V8 PDZ	JM60PQ50
HMT	CSTN14	SLI V8 PDZ V186 WESIN	JM60PQ50
L67	CSTN15	SLI V8 PDZ PDZ078R EDITS	JM60PQ50
F70	CSTN16	SLI V8 PDZ V186 NIKKL	JM60PQ50
CRQ NFG NKX OKB	CSTN17	V25 PACIF V208 OCN	JM70
RNM	CSTN18	V25 PACIF V208 JLI	JM70
MYF NRS NZY SAN SDM SEE	CSTN19	V25 PACIF V208 LAX118R CARDI MZB320R MZB	J110M90
SAN (SANE)	CSTN20	V25 REDIN V165 SARGS	J110M90
SBA	CSTN21	SLI V23 LAX V299 VTU VTU282R KWANG	PQ60
SBA (LAXE)	CSTN22	SLI SLI333R V186 DEANO V27 KWANG	MPQ60
SBA (LAXE)	CSTN23	SXC V208 VTU VTU282R KWANG	J100
NTD OXR CMA	CSTN24	SLI V23 POPPR SMO125R SMO VNY	PQ40
NTD CMA OXR (LAXE)	CSTN25	SLI SLI333R V186 FIM	MPQ60

FROM: LGB

TO:	ROUTE ID	ROUTE	ALTITUDE
SBA	CSTN26	LAX V299 VTU VTU282R KWANG	J100M80
NTD OXR CMA	CSTN27	SLI V23 LAX VNY	JM60

FROM: FUL SLI SNA TOA (RWY11)

TO:	ROUTE ID	ROUTE	ALTITUDE
SBA	CSTN28	SXC V208 VTU VTU282R KWANG	J100M80
NTD OXR CMA	CSTN29A	SLI V23 LAX VNY	M60
NTO OXR CMA	CSTN29B	SXC V208 VTU	J80

FROM: SNA

TO:	ROUTE ID	ROUTE	ALTITUDE
CRQ NFG NKX OKB	CSTN30	V23 OCN	PQ50
MYF NRS NZY SAN SDM SEE	CSTN31	V23 MZB	PQ50
RNM	CSTN32	V23 OCN V208 JLI	PQ70
SAN (SANE)	CSTN33	V23 OCN V165 SARGS	PQ50

FROM: FUL LGB SLI TOA (RWY11) when SNA South traffic

TO:	ROUTE ID	ROUTE	ALTITUDE
CRQ NFG NKX OKB	CSTN34	SLI V64 V363 DANAH V23 OCN	PQ50
RNM	CSTN35	SLI V64 V363 DANAH V23 OCN V208 JLI	PQ70
MYF NRS NZY SAN SDM SEE	CSTN36	SLI V64 V363 DANAH V23 MZB	PQ50
SAN (SANE)	CSTN37	SLI V64 V363 DANAH V165 SARGS	PQ50

FROM: FUL LGB SLI TOA (RWY 11) when SNA North traffic

TO:	ROUTE ID	ROUTE	ALTITUDE
CRQ NFG NKX OKB	CSTN38	V23 OCN	PQ50
MYF NRS NZY SAN SDM SEE	CSTN39	V23 MZB	PQ50
RNM	CSTN40	V23 OCN V208 JLI	PQ70
SAN (SANE)	CSTN41	V23 OCN V165 SARGS	PQ50

FROM: AVX

TO:	ROUTE ID	ROUTE	ALTITUDE
BUR	CSTN42	SXC V21 SLI V23 POPPR SMO125R SMO SMO311R SILEX	PQ40
BUR (LAXE)	CSTN43	SXC V21 SLI V23 LAX LAX316R SILEX	PQ40
BUR	CSTN44	SXC V21 SLI V23 LAX LAX316R SILEX	JM60
WHP VNY	CSTN45	SXC V21 SLI V23 POPPR SMO125R SMO SMO317R CANOG	PQ40
WHP VNY (LAXE)	CSTN46	SXC V21 SLI V23 LAX LAX320R CANOG	PQ40
WHP VNY	CSTN47	SXC V21 SLI V23 LAX LAX320R CANOG	JM60
CCB EMT POC	CSTN48	SLI V8 POXKU V363 POM	JMPQ50

TO:	ROUTE ID	ROUTE	ALTITUDE
CNO REI L65 AJO ONT RAL RIR RIV SBD	CSTN49	SLI V8 PDZ	JM60PQ50
L67	CSTN50	SLI V8 PDZ PDZ078R EDITS	JM60PQ50
F70	CSTN51	SLI V8 PDZ V186 NIKKL	JM60PQ50
HMT	CSTN52	SLI V8 PDZ V186 WESIN	JM60PQ50
CRQ NFG NKX OKB	CSTN53	SXC V208 OCN	JMPQ50
MYF NRS NZY SAN SDM SEE	CSTN54	SXC V208 LAX118R CARDI MZB320R MZB	J110M90
RNM	CSTN55	SXC V208 JLI	JMPQ70
MYF NRS NZY SAN SDM SEE	CSTN56	SXC V208 OCN V23 MZB	PQ50
SAN (SANE)	CSTN57	SXC V208 OCN V165 SARGS	PQ50
NTD OXR CMA	CSTN58	SXC V208 VTU	JM80PQ60
SBA	CSTN59	SXC V208 VTU VTU282R KWANG	J100M80PQ60

LOS ANGELES AREA

FROM: LAX West (J Class)

TO:	ROUTE ID	ROUTE	ALTITUDE
BUR	LAXN1	LAX316R SILEX	J50
WHP VNY	LAXN2	LAX320R CANOG	J50
AVX	LAXN3	LAXX DP SLI V21 SXC	J50
FUL LGB SLI SNA TOA	LAXN4	LAXX DP SLI	J50
CCB EMT POC	LAXN5	LAXX DP SLI V8 POXKU V363 POM	J90
CNO REI L65 AJO RAL RIR RIV SBD ONT	LAXN6	LAXX DP SLI V8 PDZ	J90
HMT	LAXN7	LAXX DP SLI V8 PDZ V186 WESIN	J90
L67	LAXN8	LAXX DP SLI V8 PDZ PDZ078R EDITS	J90
F70	LAXN9	LAXX DP SLI V8 PDZ V186 NIKKL	J90
CRQ NFG NKX OKB	LAXN10	LAXX DP SLI SLI171R ALBAS V25 PACIF V208 OCN	J110
MYF NRS NZY SAN SDM SEE	LAXN11	LAXX DP MZB	J110
RNM	LAXN12	LAXX DP SLI SLI171R ALBAS V25 PACIF V208 JLI	J110
SAN (SANE)	LAXN13	LAXX DP SLI SLI171R ALBAS V25 REDIN V165 SARGS	J110
OXR CMA NTD	LAXN14	VENTURA DP VTU	J60
SBA	LAXN15	VENTURA DP VTU VTU282R KWANG	J100

FROM: LAX East (J Class)

TO:	ROUTE ID	ROUTE	ALTITUDE
BUR	LAXN16	LAX316R SILEX	J50
WHP VNY	LAXN17	LAX320R CANOG	J50
AVX	LAXN18	LAXX DP SLI V21 SXC	J50
FUL LGB SLI SNA TOA	LAXN19	LAXX DP SLI	J40
CCB EMT POC	LAXN20	LAXX DP SLI V8 POXKU V363 POM	J90
CNO REI L65 AJO RAL RIR RIV SBD ONT	LAXN21	LAXX DP SLI V8 PDZ	J90
HMT	LAXN22	LAXX DP SLI V8 PDZ V186 WESIN	J90
L67	LAXN23	LAXX DP SLI V8 PDZ PDZ078R EDITS	J90
F70	LAXN24	LAXX DP SLI V8 PDZ V186 NIKKL	J90
CRQ NFG NKX OKB	LAXN25	LAXX DP SLI SLI148R V25 PACIF V208 OCN	J110
MYF NRS NZY SAN SDM SEE	LAXN26	LAXX DP SLI SLI148R V25 PACIF V208 LAX118R CARDI MZB320R MZB	J110
RNM	LAXN27	LAXX DP SLI SLI148R V25 PACIF V208 JLI	J110
SAN (SANE)	LAXN28	LAXX DP SLI SLI148R V25 REDIN V165 SARGS	J110
OXR CMA NTD	LAXN29	VENTURA DP VTU	J60
SBA	LAXN30	VENTURA DP VTU VTU282R KWANG	J100

FROM: LAX West and East (M Class)

TO:	ROUTE ID	ROUTE	ALTITUDE
BUR	LAXN31	LAX316R SILEX	M50
WHP VNY	LAXN32	LAX320R CANOG	M50
AVX	LAXN33	SEAL BEACH DP SLI V21 SXC	M50
FUL LGB SLI SNA TOA	LAXN34	SEAL BEACH DP SLI	M50
CCB EMT POC	LAXN35	SEAL BEACH DP SLI V8 POXKU V363 POM	M50
CNO REI L65 AJO RAL RIR RIV SBD ONT	LAXN36	SEAL BEACH DP SLI V8 PDZ	M50

TO:	ROUTE ID	ROUTE	ALTITUDE
HMT	LAXN37	SEAL BEACH DP SLI V8 PDZ V186 WESIN	M50
L67	LAXN38	SEAL BEACH DP SLI V8 PDZ PDZ078R EDITS	M50
F70	LAXN39	SEAL BEACH DP SLI V8 PDZ V186 NIKKL	M50
CRQ NFG NKX OKB (LAXW)	LAXN40	SEAL BEACH DP SLI SLI171R ALBAS V25 PACIF V208 OCN	M90
CRQ NFG NKX OKB (LAXE)	LAXN41	SEAL BEACH DP SLI SLI148R V25 PACIF V208 OCN	M90
MYF NRS NZY SAN SDM SEE (LAXW)	LAXN42	SEAL BEACH DP SLI SLI171R ALBAS V25 PACIF V208 LAX118R CARDI MZB320R MZB	M90
MYF NRS NZY SAN SDM SEE (LAXE)	LAXN43	SEAL BEACH DP SLI SLI148R V25 PACIF V208 MZB320R MZB	M90
SAN (SANE) (LAXW)	LAXN44	SEAL BEACH DP SLI SLI171R ALBAS V25 REDIN V165 SARGS	M90
SAN (SANE) (LAXE)	LAXN45	SEAL BEACH DP SLI SLI148R V25 REDIN V165 SARGS	M90
RNM(LAXW)	LAXN46	SEAL BEACH DP SLI SLI171R ALBAS V25 PACIF V208 JLI	M90
RNM(LAXE)	LAXN47	SEAL BEACH DP SLI SLI148R V25 PACIF V208 JLI	M90
OXR CMA NTD (LAXW)	LAXN48	VENTURA DP VTU	M60
OXR CMA NTD (LAXE)	LAXN49	CHATY DP VTU	M60
SBA (LAXW)	LAXN50	VENTURA DP VTU VTU282R KWANG	M60
SBA (LAXE)	LAXN51	CHATY DP KWANG	M60

FROM: LAX West and East (P and Q Class)

TO:	ROUTE ID	ROUTE	ALTITUDE
BUR	LAXN52	LAX316R SILEX	PQ40
WHP VNY	LAXN53	LAX320R CANOG	PQ40
AVX	LAXN54	SEAL BEACH DP SLI V21 SXC	PQ40
FUL LGB SLI SNA TOA	LAXN55	SEAL BEACH DP SLI	PQ40
CCB EMT POC	LAXN56	SEAL BEACH DP SLI V8 POXKU V363 POM	PQ50
CNO REI L65 AJO RAL RIR RIV SBD ONT	LAXN57	SEAL BEACH DP SLI V8 PDZ	PQ50
HMT	LAXN58	SEAL BEACH DP SLI V8 PDZ V186 WESIN	PQ50
L67	LAXN59	SEAL BEACH DP SLI V8 PDZ PDZ078R EDITS	PQ50
F70	LAXN60	SEAL BEACH DP SLI V8 PDZ V186 NIKKL	PQ50
CRQ NFG NKX OKB	LAXN61	SEAL BEACH DP SLI V64 V363 DANAH V23 OCN	PQ50
CRQ NFG NKX OKB (SNAN)	LAXN62	SEAL BEACH DP SLI V23 OCN	PQ50
MYF NRS NZY SAN SDM SEE	LAXN63	SEAL BEACH DP SLI V64 V363 DANAH V23 MZB	PQ50
MYF NRS NZY SAN SDM SEE (SNAN)	LAXN64	SEAL BEACH DP SLI V23 MZB	PQ50
RNM	LAXN65	SEAL BEACH DP SLI V64 V363 DANAH V23 OCN JLI	PQ70
RNM (SNAN)	LAXN66	SEAL BEACH DP SLI V23 OCN V208 JLI	PQ70
SAN (SANE)	LAXN67	SEAL BEACH DP SLI V64 V363 DANAH V165 SARGS	PQ50
OXR CMA NTD	LAXN68	VNY	PQ40
SBA (LAXW)	LAXN69	VENTURA DP VTU VTU282R KWANG	PQ60
SBA (LAXE)	LAXN70	CHATY DP KWANG	PQ60

FROM: HHR TOA (RWY29)

TO:	ROUTE ID	ROUTE	ALTITUDE
BUR	SCTN1	SMO SMO311R SILEX	JM50PQ40
WHP VNY	SCTN2	SMO SMO317R CANOG	JM50PQ40
AVX	SCTN3	SXC	JM50PQ40
FUL LGB SLI SNA TOA	SCTN4	LIMBO V64 SLI	JM50PQ40
FUL LGB SLI SNA TOA (LAXE)	SCTN5	SLI	JMPQ40
CCB EMT POC	SCTN6	LIMBO V64 SLI V8 POXKU V363 POM	J90MPQ50
CNO REI L65 AJO RAL RIR RIV SBD ONT	SCTN7	LIMBO V64 SLI V8 PDZ	J90MPQ50
HMT	SCTN8	LIMBO V64 SLI V8 PDZ V186 WESIN	J90MPQ50

TO:	ROUTE ID	ROUTE	ALTITUDE
L67	SCTN9	LIMBO V64 SLI V8 PDZ PDZ078R EDITS.	J90MPQ50
F70	SCTN10	LIMBO V64 SLI V8 PDZ V186 NIKKL	J90MPQ50
CRQ NFG NKX OKB	SCTN11	LIMBO V64 V363 DANAH V23 OCN	PQ50
CRQ NFG NKX OKB	SCTN12	LIMBO V64 SLI V23 OCN	J110M90
CRQ NFG NKX OKB (LAXE)	SCTN13	SLI SLI148R V25 PACIF V208 OCN	J110M90
CRQ NFG NKX OKB (SNAN)	SCTN14	LIMBO V64 SLI V23 OCN	PQ50
MYF NRS NZY SAN SDM SEE	SCTN15	LIMBO V64 V363 DANAH V23 MZB	PQ50
MYF NRS NZY SAN SDM SEE (LAXE)	SCTN16	SLI V64 V363 DANAH V23 MZB	PQ50
MYF NRS NZY SAN SDM SEE	SCTN17	LIMBO V64 WILMA V25 PACIF V208 LAX118R CARDI MZB320R MZB	J110M90
MYF NRS NZY SAN SDM SEE (LAXE)	SCTN18	SLI SLI148R V25 PACIF V208 MZB320R MZB	J110M90
MYF NRS NZY SAN SDM SEE (SNAN)	SCTN19	LIMBO V64 SLI V23 MZB	PQ50
RNM	SCTN20	LIMBO V64 V363 DANAH V23 OCN V208 JLI	PQ70
RNM (SNAN)	SCTN21	LIMBO V64 SLI V23 OCN V208 JLI	PQ70
RNM	SCTN22	LIMBO V64 SLI V23 OCN V208 JLI	J110M90
RNM (LAXE)	SCTN23	SLI SLI148R V25 PACIF V208 JLI	J110M90
SAN (SANE)	SCTN24	LIMBO V64 V363 DANAH V165 SARGS	PQ50
SAN (SANE)	SCTN25	LIMBO V64 WILMA V25 REDIN V165 SARGS	J110M90
OXR CMA NTD	SCTN26	SMO VNY	PQ40
OXR CMA NTD	SCTN27	LAX VTU	JM60
SBA	SCTN28	SMO V107 SADDE V299 VTU VTU282R KWANG	J100MPQ60
SBA (LAXE)	SCTN29	LAX V23 V186 DEANO V27 KWANG	JM50PQ40
EDW L00 MHV PMD WJF IYK NID TSP VCV	SCTN30	LAX V165 LANGE V518 PMD	JMPQ70

FROM: SMO

TO:	ROUTE ID	ROUTE	ALTITUDE
BUR	SMON1	SMO SMO311R SILEX	JM50PQ40
WHP VNY	SMON2	SMO SMO317R CANOG	JM50PQ40
AVX	SMON3	SMO SMO125R SXC350R SXC	M50PQ40
FUL LGB SLI SNA TOA	SMON4	SMO SMO125R V64 SLI	M50PQ40
FUL LGB SLI SNA TOA	SMON5	SLI	J50
FUL LGB SLI SNA TOA (LAXE)	SMON6	SMO LAX V23 SLI	JMPQ40
CCB EMT POC	SMON7	SMO SMO125R V64 SLI V8 POXKU V363 POM	MPQ50
CCB EMT POC	SMON8	SLI V8 POXKU V363 POM	J90
CNO REI L65 AJO RAL RIR RIV SBD ONT	SMON9	SMO SMO125R V64 SLI V8 PDZ	MPQ50
CNO REI L65 AJO RAL RIR RIV SBD ONT	SMON10	SLI V8 PDZ	J90
HMT	SMON11	SMO SMO125R V64 SLI V8 PDZ V186 WESIN	MPQ50
HMT	SMON12	SLI V8 PDZ V186 WESIN	J90
L67	SMON13	SMO SMO125R V64 SLI V8 PDZ PDZ078R EDITS	MPQ50
L67	SMON14	SLI V8 PDZ PDZ078R EDITS	J90
F70	SMON15	SMO SMO125R V64 SLI V8 PDZ V186 NIKKL	MPQ50
F70	SMON16	SLI V8 PDZ V186 NIKKL	J90
CRQ NFG NKX OKB	SMON17	SMO SMO125R V64 V363 DANAH V23 OCN	PQ50
CRQ NFG NKX OKB	SMON18	SMO SMO125R V64 SLI V23 OCN	M90
CRQ NFG NKX OKB	SMON19	SXC V208 OCN	J110
CRQ NFG NKX OKB (LAXE)	SMON20	SMO LAX V23 SLI SLI148R V25 PACIF V208 OCN	J110M90
CRQ NFG NKX OKB (SNAN)	SMON21	SMO SMO125R V64 SLI V23 OCN	PQ50
MYF NRS NZY SAN SDM SEE	SMON22	SMO SMO125R V64 V363 DANAH V23 MZB	PQ50
MYF NRS NZY SAN SDM SEE (LAXE)	SMON23	SMO LAX V23 SLI V64 V363 DANAH V23 MZB	PQ50
MYF NRS NZY SAN SDM SEE	SMON24	SMO SMO125R V64 SLI V23 MZB	M90
MYF NRS NZY SAN SDM SEE	SMON25	SXC V208 LAX118R CARDI MZB320R MZB	J110
MYF NRS NZY SAN SDM SEE (LAXE)	SMON26	SMO LAX V23 SLI SLI148R V25 PACIF V208 LAX118R CARDI MZB320R MZB	J110M90
MYF NRS NZY SAN SDM SEE (SNAN)	SMON27	SMO SMO125R V64 SLI V23 MZB	PQ50

TO:	ROUTE ID	ROUTE	ALTITUDE
RNM	SMON28	SMO SMO125R V64 V363 DANAH V23 OCN V208 JLI	PQ70
RNM (SNAN)	SMON29	SMO SMO125R V64 SLI V23 OCN V208 JLI	PQ70
RNM	SMON30	SMO SMO125R V64 SLI V23 OCN V208 JLI	M90
RNM	SMON31	SXC V208 JLI	J110
RNM (LAXE)	SMON32	SMO LAX V23 SLI V23 OCN V208 JLI	J110M90
SAN (SANE)	SMON33	SMO SMO125R V64 V363 DANAH V165 SARGS	PQ50
SAN (SANE)	SMON34	SMO SMO125R V64 SLI V165 SARGS	M90
SAN (SANE)	SMON35	SXC V208 PACIF V25 REDIN V165 SARGS	J110
OXR CMA NTD	SMON36	SMO VNY	PQ40
OXR CMA NTD	SMON37	VTU	JM60
SBA	SMON38	SMO V107 SADDE V299 VTU VTU282R KWANG	J100MPQ60
SBA (LAXE)	SMON39	LAX V23 V186 DEANO V27 KWANG	JM50PQ40

EMPIRE AREA

FROM: CCB CNO EMT HMT REI L65 AJO L67 RAL RIR RIV SBD F70 ONT POC

TO:	ROUTE ID	ROUTE	ALTITUDE
BUR VNY WHP	ONTN1	PDZ V186 VNY	PQ60
BUR VNY WHP	ONTN2	PDZ V197 POM V264 V186 VNY	JM80
HHR	ONTN3	PDZ PDZ270R HHR RY25 LOC	JMPQ30
LAX	ONTN4	PDZ PDZ270R LAX RWY 24R LOC	JMPQ40
LAX (LAXE)	ONTN5	PDZ PDZ270R V394 AHEIM V8 TANDY	PQ40
LAX (LAXE)	ONTN6	PDZ V16 PRADO V363 DANAH V23 SLI V8 TANDY	JM80
SMO	ONTN7	PDZ V186 DARTS	JMPQ60
AVX	ONTN8	PDZ V16 PRADO V363 DANAH SXC065R SXC	JMPQ70
FUL LGB SLI TOA	ONTN9	PDZ PDZ270R V394 SLI	JMPQ40
SNA	ONTN10	PDZ PDZ270R V363 POXKU V8 SLI	JMPQ40
CRQ NFG NKX OKB	ONTN11	PDZ V186 ROBNN V458 OCN	JM110PQ70
MYF NRS NZY SAN SDM SEE	ONTN12	PDZ V186 HAILE V66 MZB	JM110PQ90
RNM	ONTN13	PDZ V186 ROBNN V208 JLI	JM110PQ70
CMA OXR NTD	ONTN14	PDZ V186 FIM	PQ60
CMA OXR NTD	ONTN15	PDZ V197 POM V264 V186 FIM	JM80
SBA	ONTN16	PDZ V186 DEANO V27 KWANG	PQ60
SBA	ONTN17	PDZ V197 POM V264 V186 DEANO V27 KWANG	JM80

PT MUGU AREA

FROM: OXR CMA

TO:	ROUTE ID	ROUTE	ALTITUDE
SBA	VTUN1	KWANG	JMPQ40
BUR	VTUN2	VTU054R TOAKS	JMPQ50
WHP VNY PMD WJF EDW NID VCV IYK L00	VTUN3	CMA CMA072R GINNA	JMPQ50
MHV TSP	VTUN4	FIM V386 PMD	JMPQ70
AVX	VTUN5	VTU V208 SXC	JM70PQ50
FUL LGB SLI TOA	VTUN6	VTU044R GINNA V326 VNY V186 ADAMM V394 SLI	PQ50
SNA	VTUN7	VTU044R GINNA V326 VNY V186 BAYJY V363 POXKU V8 SLI	PQ50
HHR	VTUN8	VTU V299 SADDE V107 SMO SMO125R POPPR V23 SLI	PQ50
FUL LGB SLI TOA SNA HHR	VTUN9	VTU V208 SXC SLI	JM70
HHR (LAXE)	VTUN10	VTU044R GINNA V326 VNY V186 ELMOO	JM70PQ50
LAX	VTUN11	VTU V299 SADDE V107 SMO	JMPQ50
LAX (LAXE)	VTUN12	VTU V25 EXERT	JMPQ50
SMO	VTUN13	VTU044R GINNA V326 VNY V186 DARTS	JMPQ50
CCB	VTUN14	VTU044R GINNA V326 VNY V186 V264 POM	JM70PQ50

TO:	ROUTE ID	ROUTE	ALTITUDE
CNO EMT REI L65 AJO ONT POC RAL RIR RIV SBD	VTUN15	VTU044R GINNA V326 VNY V186 PDZ	PQ50
CNO EMT REI L65 AJO ONT POC RAL RIR RIV SBD	VTUN16	VTU044R GINNA V326 VNY V186 V264 POM V197 PDZ	JM70
HMT	VTUN17	VTU044R GINNA V326 VNY V186 PDZ V186 WESIN	PQ50
HMT	VTUN18	VTU044R GINNA V326 VNY V186 V264 POM V197 PDZ V186 WESIN	JM70
L67	VTUN19	VTU044R GINNA V326 VNY V186 PDZ PDZ078R EDITS	PQ50
L67	VTUN20	VTU044R GINNA V326 VNY V186 V264 POM V197 PDZ PDZ078R EDITS	JM70
F70	VTUN21	VTU044R GINNA V326 VNY V186 PDZ V186 NIKKL	PQ50
F70	VTUN22	VTU044R GINNA V326 VNY V186 V264 POM V197 PDZ V186 NIKKL	JM70
CRQ NFG NKX OKB	VTUN23	VTU044R GINNA V326 VNY V186 ROBNN V458 OCN	PQ70
CRQ NFG NKX OKB (LAXE)	VTUN24	VTU044R GINNA V326 VNY V186 ROBNN V458 OCN	PQ70
CRQ NFG NKX OKB	VTUN25	VTU V208 SXC V208 OCN	J110M90
MYF NRS NZY SAN SDM SEE	VTUN26	VTU044R GINNA V326 VNY V186 HAILE V66 MZB	PQ90
MYF NRS NZY SAN SDM SEE (LAXE)	VTUN27	VTU044R GINNA V326 VNY V186 HAILE V66 MZB	PQ70
MYF NRS NZY SAN SDM SEE	VTUN28	VTU V208 SXC V208 LAX118R CARDI MZB320R MZB	J110M90
RNM	VTUN29	VTU044R GINNA V326 VNY V186 ROBNN V208 JLI	PQ70
RNM (LAXE)	VTUN30	VTU044R GINNA V326 VNY V186 ROBNN V208 JLI	PQ70
RNM	VTUN31	VTU V208 SXC V208 JLI	J110M90
SAN (SANE)	VTUN32	VTU044R GINNA V326 VNY V186 BAYJY V363 DANAH V165 SARGS	PQ50
SAN (SANE)	VTUN33	VTU V208 SXC V27 REDIN V165 SARGS	J110M90
SMX	VTUN34	V25 RZS RZS286R KOAKS	JMPQ80
IZA	VTUN35	V25 RZS RZS277R CALLI	JMPQ60
LPC	VTUN36	V27 GVO	JMPQ60

SAN DIEGO AREA

FROM: CRQ MYF NFG NKX NRS NZY SAN SDM SEE RNM OKB L18 TIJ

TO:	ROUTE ID	ROUTE	ALTITUDE
AVX	SANN1	MZB V23 OCN V208 SXC	PQ60
AVX	SANN2	MZB293R V27 SXC	J100M80
FUL LGB SNA SLI TOA LAX	SANN3	OCN V23 SLI	PQ60
FUL LGB SNA SLI TOA LAX	SANN4	MZB293R SLI148R SLI	J100M80
LAX (LAXE)	SANN5	OCN V23 SLI V8 TANDY	PQ60
LAX (LAXE)	SANN6	MZB293R SLI148R VTU114R V8 TANDY	J100M80
HHR	SANN7	OCN V23 SLI SLI340R WELLZ HHR RY25 LOC	PQ60
HHR	SANN8	MZB293R SLI148R SLI SLI340R WELLZ HHR RY25 LOC	J100M80
SMO	SANN9	OCN V23 POPPR SMO125R SMO SMO059R ELMOO	PQ60
SMO	SANN10	MZB293R SLI148R SLI V459 DARTS	J100M80
SMO (LAXE)	SANN11	OCN V23 SLI SLI333R V186 DARTS	PQ60
SMO (LAXE)	SANN12	MZB293R SLI148R SLI SLI333R V186 DARTS	J100M80
BUR	SANN13	OCN V23 POPPR SMO125R SMO SMO311R SILEX	PQ60
BUR	SANN14	MZB293R SLI148R SLI V23 LAX LAX316R SILEX	J100M80
WHP VNY	SANN15	OCN V23 POPPR SMO125R SMO SMO317R CANOG	PQ60

TO:	ROUTE ID	ROUTE	ALTITUDE
WHP VNY	SANN16	MZB293R SLI148R SLI V23 LAX LAX320R CANOG	J100M80
BUR VNY WHP (LAXE)	SANN17	OCN V23 SLI SLI333R V186 VNY	PQ60
BUR VNY WHP (LAXE)	SANN18	MZB293R SLI148R SLI SLI333R V186 VNY	J100M80
CNO AJO L65 REI ONT RAL RIR SBD RIV	SANN19	OCN V23 DANAH V363 POXKU V8 PDZ	PQ60
ONT SBD	SANN20	V186 TANNR HDF PETIS	JM100
CNO AJO RAL RIR	SANN21	V186 PDZ	JM100
L65 REI RIV	SANN22	V186 TANNR HDF	JM100
CCB EMT POC	SANN23	OCN V23 DANAH V363 POM	PQ60
CCB EMT POC	SANN24	MZB293R POM164R POM	J100M80
HMT	SANN25	OCN V23 DANAH V363 POXKU V8 PDZ V186 WESIN	PQ60
HMT	SANN26	V186 WESIN	JM100
L67	SANN27	OCN V23 DANAH V363 POXKU V8 PDZ PDZ078R EDITS	PQ60
L67	SANN28	V186 PDZ PDZ078R EDITS	JM100
F70	SANN29	OCN V23 DANAH V363 POXKU V8 PDZ V186 NIKKL	PQ60
F70	SANN30	V186 NIKKL	JM100
OXR CMA NTD	SANN31	OCN V23 SLI SLI272R SMO125R SMO VNY	PQ60
OXR CMA NTD	SANN32	MZB293R V27 SXC V208 VTU	J100M80
CMA OXR NTD (LAXE)	SANN33	OCN V23 SLI SLI333R V186 FIM	PQ60
CMA OXR NTD (LAXE)	SANN34	MZB293R SLI148R SLI SLI333R V186 FIM	J100M80
SBA	SANN35	OCN V23 LAX V299 VTU VTU282R KWANG	PQ60
SBA	SANN36	MZB293R V27 SXC V208 VTU VTU282R KWANG	J100M80
SBA (LAXE)	SANN37	OCN V23 DANAH V363 BAYJY V186 DEANO V27 KWANG	PQ60

SANTA BARBARA AREA
FROM: SBA

TO:	ROUTE ID	ROUTE	ALTITUDE
BUR	SBAN1	KWANG CMA CMA078R TOAKS	PQ50
WHP VNY	SBAN2	KWANG CMA CMA072R GINNA	PQ50
BUR VNY	SBAN3	HENER V186 FIM FERNANDO STAR	J110M90
AVX	SBAN4	KWANG VTU V208 SXC	JM70PQ50
FUL LGB SLI TOA	SBAN5	KWANG CMA VNY V186 ADAMM V394 SLI	PQ50
SNA	SBAN6	KWANG CMA VNY V186 BAYJY V363 POXKU V8 SLI	PQ50
HHR	SBAN7	KWANG VTU V299 SADDE V107 SMO SMO125R POPPR V23 SLI	PQ50
FUL LGB SLI TOA SNA HHR	SBAN8	KWANG VTU V208 SXC SLI	J110M90
HHR (LAXE)	SBAN9	KWANG CMA VNY V186 ELMOO	PQ50
LAX	SBAN10	KWANG VTU V299 SADDE V107 SMO	JM110PQ50
LAX (LAXE)	SBAN11	KWANG VTU V25 EXERT	JM70PQ50
SMO	SBAN12	KWANG CMA VNY V186 DARTS	PQ50
SMO	SBAN13	HENER FIM V186 DARTS	J110M90
CCB	SBAN14	KWANG CMA VNY V186 V264 POM	PQ50
CCB	SBAN15	HENER V186 FIM V186 V264 POM	JM70
CNO EMT REI L65 AJO POC ONT RAL RIR RIV SBD	SBAN16	KWANG CMA VNY V186 PDZ	PQ50
CNO EMT REI L65 AJO POC ONT RAL RIR RIV SBD	SBAN17	HENER FIM V186 V264 POM V197 PDZ	J110M90
HMT	SBAN18	KWANG CMA VNY V186 PDZ V186 WESIN	PQ50
HMT	SBAN19	HENER V186 V264 POM V197 PDZ V186 WESIN	J110M90
L67	SBAN20	KWANG CMA VNY V186 PDZ PDZ078R EDITS	PQ50
L67	SBAN21	HENER FIM V186 V264 POM V197 PDZ PDZ078R EDITS	J110M90

TO:	ROUTE ID	ROUTE	ALTITUDE
F70	SBAN22	KWANG CMA VNY V186 PDZ V186 NIKKL	PQ50
F70	SBAN23	HENER FIM V186 V264 POM V197 PDZ V186 NIKKL	J110M90
CRQ NFG NKX OKB	SBAN24	HENER V186 DARTS V597 OCN	PQ90
CRQ NFG NKX OKB (LAXE)	SBAN25	KWANG CMA VNY V186 ROBNN V458 OCN	PQ70
CRQ NFG NKX OKB	SBAN26	KWANG VTU V208 SXC V208 OCN	J110M90
MYF NRS NZY SAN SDM SEE	SBAN27	HENER V186 DARTS V597 MZB	PQ90
MYF NRS NZY SAN SDM SEE (LAXE)	SBAN28	KWANG CMA VNY V186 HAILE V66 MZB	PQ70
MYF NRS NZY SAN SDM SEE	SBAN29	KWANG VTU V208 SXC V208 LAX118R CARDI MZB320R MZB	J110M90
SAN (SANE)	SBAN30	KWANG CMA VNY V186 BAYJY V363 DANAH V165 SARGS	PQ50
SAN (SANE)	SBAN31	KWANG VTU V208 SXC V27 REDIN V165 SARGS	J110M90
RNM	SBAN32	HENER V186 DARTS V597 OCN V208 JLI	PQ90
RNM (LAXE)	SBAN33	KWANG CMA VNY V186 ROBNN V208 JLI	PQ70
RNM	SBAN34	KWANG VTU V208 JLI	J110M90
OXR CMA NTD	SBAN35	KWANG CMA	JMPQ30
PSP UDD TRM	SBAN36	FIM V186 NIKKL V64 TRM PSP	PQ110

SANTA BARBARA AREA

FROM: SBP SMX VBG LPC IZA

TO:	ROUTE ID	ROUTE	ALTITUDE
BUR VNY WHP	SBAN37	RZS V186 FIM	PQ70
BUR VNY	SBAN38	RZS V386 FIM FERNANDO STAR	J110M90
AVX	SBAN39	RZS VTU V208 SXC	JMPQ70
FUL LGB SLI TOA	SBAN40	RZS V186 ADAMM V394 SLI	PQ70
SNA	SBAN41	RZS V186 BAYJY V363 POXKU V8 SLI	PQ70
HHR	SBAN42	RZS VTU V299 SADDE V107 SMO SMO125R POPPR V23 SLI	PQ70
FUL LGB SLI TOA SNA HHR	SBAN43	RZS VTU V208 SXC SLI	J110M90
HHR (LAXE)	SBAN44	RZS V186 ELMOO	PQ70
LAX	SBAN45	RZS VTU SADDE STAR	JM110PQ70
LAX (LAXE)	SBAN46	RZS VTU V25 EXERT	JM70PQ50
SMO	SBAN47	RZS V186 DARTS	PQ70
SMO	SBAN48	RZS V386 FIM V186 DARTS	J110M90
CCB	SBAN49	RZS V186 V264 POM	PQ70
CCB	SBAN50	RZS V386 FIM V186 V264 POM	J110M90
CNO EMT REI L65 AJO POC ONT RAL RIR RIV SBD	SBAN51	RZS V186 PDZ	PQ70
CNO EMT REI L65 AJO POC ONT RAL RIR RIV SBD	SBAN52	RZS V386 FIM V186 V264 POM V197 PDZ	J110M90
HMT	SBAN53	RZS V186 PDZ V186 WESIN	PQ70
HMT	SBAN54	RZS V386 FIM V186 V264 POM V197 PDZ V186 WESIN	J110M90
L67	SBAN55	RZS V186 PDZ PDZ078R EDITS	PQ70
L67	SBAN56	RZS V386 FIM V186 V264 POM V197 PDZ PDZ078R EDITS	J110M90
F70	SBAN57	RZS V186 PDZ V186 NIKKL	PQ70
F70	SBAN58	RZS V386 FIM V186 V264 POM V197 PDZ V186 NIKKL	J110M90
CRQ NFG NKX OKB	SBAN59	RZS V597 OCN	PQ90
CRQ NFG NKX OKB (LAXE)	SBAN60	RZS V186 ROBNN V458 OCN	PQ70
CRQ NFG NKX OKB	SBAN61	RZS VTU V208 SXC V208 OCN	J110M90
MYF NRS NZY SAN SDM SEE	SBAN62	RZS V597 MZB	PQ90
MYF NRS NZY SAN SDM SEE (LAXE)	SBAN63	RZS V186 HAILE V66 MZB	PQ70
MYF NRS NZY SAN SDM SEE	SBAN64	RZS VTU V208 SXC V208 LAX118R CARDI MZB320R MZB	J110M90
SAN (SANE)	SBAN65	RZS V186 VNY V186 BAYJY V363 DANAH V165 SARGS	PQ70
SAN (SANE)	SBAN66	RZS VTU V208 SXC V27 REDIN V165 SARGS	J110M90
RNM	SBAN67	RZS V597 OCN V208 JLI	PQ90

TO:	ROUTE ID	ROUTE	ALTITUDE
RNM (LAXE)	SBAN68	RZS V186 ROBNN V208 JLI	PQ70
RNM	SBAN69	RZS VTU V208 JLI	J110M90
OXR CMA NTD	SBAN70	RZS VTU	JMPQ70
PSP UDD TRM	SBAN71	RZS V386 FIM V186 NIKKL V64 TRM PSP	PQ110

PALM SPRINGS AREA
FROM: PSP UDD TRM

TO:	ROUTE ID	ROUTE	ALTITUDE
BUR VNY WHP	PSPN1	V388 PDZ V186 VNY	PQ100
BUR VNY WHP	PSPN2	V388 PDZ V197 POM V264 V186 VNY	JM120
AJO CNO RAL RIR ONT RIV SBD	PSPN3	V388 PDZ	JM120PQ100
HMT	PSPN4	V388 PDZ V186 WESIN	JM120PQ100
EMT POC CCB	PSPN5	V388 PDZ PDZ270R V363 POM	JM120PQ100
L67	PSPN6	V388 PDZ PDZ078R EDITS	JM120PQ100
F70	PSPN7	V388 PDZ V186 NIKKL	JM120PQ100
FUL LGB SLI TOA SNA	PSPN8	V388 ACINS V283 SLI	JM120PQ100
HHR	PSPN9	V388 PDZ PDZ270R HHR RY25 LOC	JM120PQ100
LAX	PSPN10A	V388 PDZ V16 LAHAB	M120PQ100
LAX	PSPN10B	V388 LENHO SEAVU SEAVU ARRIVAL	J120
LAX (LAXE)	PSPN11	V388 PDZ PDZ270R V394 SLI V8 TANDY	PQ100
LAX (LAXE)	PSPN12	V388 ACINS V283 SLI V8 TANDY	JM120
SMO	PSPN13	V388 PDZ V186 DARTS	JM120PQ100
CMA OXR NTD	PSPN14	V388 PDZ V186 FIM	PQ100
CMA OXR NTD	PSPN15	V388 PDZ V197 POM V264 V186 FIM	JM120
SBA	PSPN16	V388 PDZ V186 DEANO V27 KWANG	PQ100
SBA	PSPN17	V388 PDZ V197 POM V264 V186 DEANO V27 KWANG	M120

PALMDALE AREA
FROM: EDW L00 MHV PMD WJF

TO:	ROUTE ID	ROUTE	ALTITUDE
HHR	EDWN1	PMD V518 KIMMO V459 DARTS V186 ADAMM V394 HHR RY25 LOC	JMPQ80
FUL LGB SLI SNA TOA	EDWN2	PMD V201 BERRI V459 SLI	JMPQ90
FUL LGB SLI SNA TOA (LAXE)	EDWN3	PMD V386 V23 LAX V25 ALBAS SLI	MPQ80

RNAV Routing Pitch and Catch Points

The purpose of this section of the Special High Altitude Routes is to present user routing options for flight within the initial HAR Phase I expansion airspace. Users are able to fly user-preferred routes, referred to as non-restrictive routing (NRR), between specific fixes described by **pitch** (entry into) and **catch** (exit out of) fixes in the HAR airspace. Pitch points indicate an end of departure procedures, preferred IFR routings, or other established routing programs where a flight can begin a segment of NRR. The catch point indicates where a flight ends a segment of NRR and joins published arrival procedures, preferred IFR routing, or other established routing programs.

The HAR Phase I expansion airspace is defined as that airspace at and above FL 350 in fourteen of the western and southern Air Route Traffic Control Centers (ARTCCs). The airspace includes Minneapolis (ZMP), Chicago (ZAU), Kansas City (ZKC), Denver (ZDV), Salt Lake City (ZLC), Oakland (ZOA), Seattle Centers (ZSE), Los Angeles (ZLA), Albuquerque (ZAB), Fort Worth (ZFW), Memphis (ZME), and Houston (ZHU). Jacksonville (ZJX) and Miami (ZMA) are included for east-west routes only.

To develop a flight plan, select pitch and catch points based upon your desired route across the Phase I airspace. Filing requirements to pitch points, and from catch points, remain unchanged from current procedures. For the portion of the route between the pitch and catch points, non-restrictive routing is permitted.

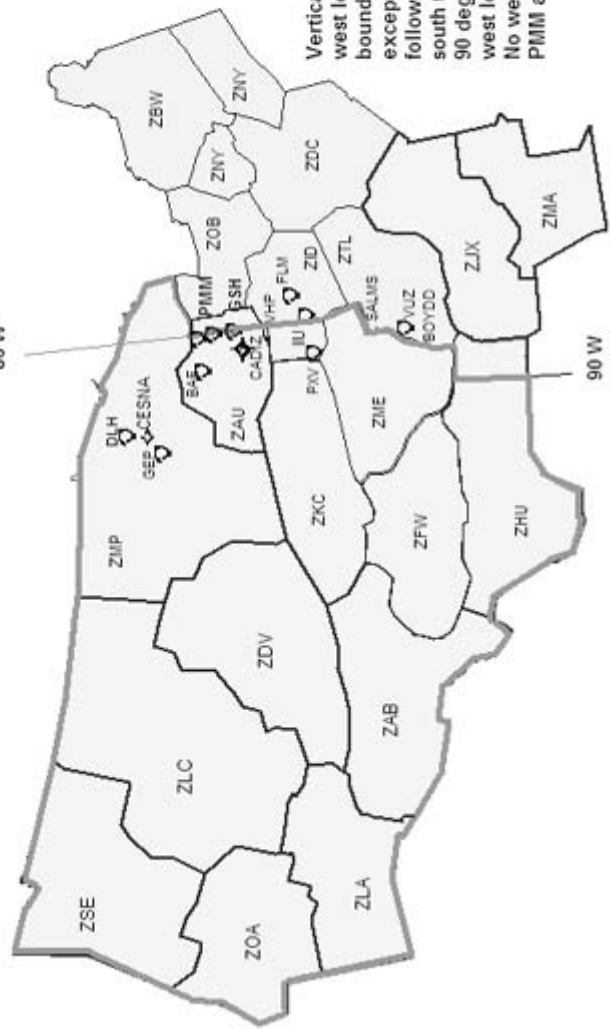
Where pitch points for a specific airport are not identified, aircraft should file an appropriate departure procedure (DP), or any other user preferred routing prior to the NRR portion of their routing. Where catch points for a specific airport are not identified aircraft should file, after the NRR portion of their routing, an appropriate arrival procedure or other user preferred routing to their destination.

Additionally, information concerning the location and schedule of Special Use Airspace (SUA) and Air Traffic Control Assigned Airspace (ATCAA) can be found on the Web Site: http://sua.faa.gov/sua/Welcome.do. ATCAA refers to airspace in the high altitude structure supporting military and other special operations. Users are encouraged to file around these areas when they are scheduled to be active, thereby avoiding unplanned reroutes around them.

In conjunction with the HAR program RNAV routes have been established to provide for a systematic flow of air traffic in specific portions of the enroute flight environment. The designator for these RNAV routes begin with the letter Q, for example, Q-501. Where those routes aid in the efficient orderly management of air traffic they will be published as preferred IFR routes.

High Altitude Redesign (HAR) Phase One Expansion Airspace

Except as noted, flights entering HAR expansion airspace may pitch at the airspace boundary, at the vertical pitch line, or at the fixes listed on the following page.



Vertical Pitch Line: 86 degrees west longitude from the ZMP/ZAU boundary to the ZME/ZID boundary, except between PMM and GSH, then following the ZME east boundary south to the ZHU boundary. Then west to 90 degrees west longitude, the 90 degrees west longitude to the ZHU southern boundary. No westbound traffic between PMM and GSH.

HAR Special High Altitude Pitch (entry) Points for Nonrestrictive Routing for Airports Located Outside HAR Phase I Expansion Airspace

Westbound traffic originating outside of HAR airspace entering ZMP, ZAU, ZKC and ZME can begin non–restrictive routing over any of the following pitch points (listed from north to south):

DLH, CESNA, GEP, BAE, MKG, GRR, PMM, GSH, CADIZ, FWA, VHP, FLM, IIU, PXV, SGF, RZC, BNA, SALMS, VUZ, BOYDD, MIE.

Traffic originating outside of HAR airspace may also begin Nonrestrictive Routing upon crossing the pitch line depicted on the associated graphic.

HAR Special High Altitude Pitch Points for Airports Located Within (below) HAR Phase I Expansion Airspace

This section lists pitch points for airports within the HAR Phase I expansion airspace.

Albuquerque	ABQ, GUP, HANOS or ZUN
Austin	ABI, FUZ, JCT, MQP, NAVYS, SJT or TNV
Boca Raton, FL	TBIRD KPASA Q118 LENIE or TBIRD KPASA Q116 CEEYA or TBIRD KPASA Q110 FEONA or TBIRD SMELZ Q106 BULZI or TBIRD SMELZ Q106 GADAY
Burbank includes Santa Monica and Van Nuys	GMN, MARKS or DAG LAS or HEC EED or PMD BLH
Chicago Terminal Area	IOW, PLL275065, MZV or BAE
Dallas/Fort Worth Terminal Area	ABI, LBB, GTH, CDS, MRMAC, IRW, TUL, MLC, TXK ELD, SWB or Aircraft destined the Chicago terminal area Except MDW EAKER MIDEE BDF BRADFORD–STAR or MLC J105 SGF BDF BRADFORD–STAR
Denver Terminal Area	PUB, DVC, DBL, RLG, EKR, LAR, MBW, CYS, BFF, HANKI, NATTI, ASHBY, BELKE, CABET, WEEDS, OR BINKE
Fort Lauderdale (or) Fort Lauderdale Executive	THNDR KPASA Q118 LENIE or THNDR KPASA Q116 CEEYA or THNDR KPASA Q110 FEONA or THNDR SMELZ Q106 GADAY or THNDR SMELZ Q106 BULZI
Houston Bush	LIT, ELD, MLC, JCT or Aircraft destined Atlanta Terminal Area LCH Q24 PAYTN HONIE–RNAV STAR or Aircraft joining J37 to the northeast, GUSTI SID GUSTI Q22 CATLN or Aircraft joining J42 to the northeast, EL DORADO SID ELD Q32 J42

Houston Hobby	LIT, ELD, MLC, JCT, or Aircraft joining J42 to the northeast, EL DORADO SID ELD Q32 J42
Jacksonville, FL	TAY
Kansas City Terminal Area	TIFTO, CATTS or KENTN
Los Angeles, includes Ontario	GMN, RZS or DAG LAS or TRM EED or TRM PKE
Las Vegas	DOBNE, MOSBI, NICLE, TRALR or ZELOT
Long Beach includes Orange County	GMN SNS, EHF, LANDO or TRM PKE or TRM EED
Memphis	BNA, HAAWK, SALMS or SQS
Miami Terminal Area	WINCO KPASA Q118 LENIE or WINCO KPASA Q116 CEEYA or WINCO KPASA Q110 FEONA or WINCO SMELZ Q106 GADAY or WINCO SMELZ Q106 BULZI
Milwaukee	GREAS
Minneapolis Terminal Area*	ONL, ABR, FAR, OBH, OVR, FOD
New Orleans Terminal Area	AEX, MEI, SQS, KAPLN
Orlando Terminal Area	WEBBS BRUTS Q118 LENIE or WEBBS GULFR Q116 CEEYA or WEBBS BULZI Q106 GADAY or WEBBS FEONA or WEBBS BULZI
Palm Beach, FL	TBIRD KPASA Q118 LENIE or TBIRD KPASA Q116 CEEYA or TBIRD KPASA Q110 FEONA or TBIRD SMELZ Q106 BULZI or TBIRD SMELZ Q106 GADAY
Palm Springs	TRM JOTNU BLD or TRM EED or TRM PKE
Phoenix	CHILY, CIE, CULTS, RSK, DOVEE, GCN, MESSI, SJN, DRYHT or MOHAK
Portland, OR	PDT, TIMEE

Salt Lake City	HVE, DTA, MLF, BCE, OAL, MTU, BVL, OCS, TWF, DBS, BPI or TCH J56 CHE or TCH J173 EKR
Saint Louis	VIH, MAP, MYERZ, MCM or HLV MCI
San Antonio Terminal Area	FUZ, SJT, MQP, ABI or Aircraft North of LFK, LFK or Aircraft South of HUB, ELA or Aircraft South of LFK and North of HUB LCH
San Diego	TRM EED or TRM PKE or TRM JOTNU BLD
San Francisco Bay Area Oakland San Jose	GALLI, INSLO, HAROL JSICA GALLI, INSLO, HAROL JSICA GALLI or INSLO
Seattle	BLUIT
Southwest Florida Airports (RSW/FMY)	JOCKS KPASA Q118 LENIE or JOCKS KPASA Q116 CEEYA or JOCKS KPASA Q110 FEONA or JOCKS SMELZ Q106 GADAY or JOCKS SMELZ Q106 BULZI
Tampa Terminal Area	FEONA, BULZI or BRUTS Q118 LENIE or GULFR Q116 CEEYA or BULZI Q106 GADAY

*MSP area departures with destinations east of 93 degrees west longitude via preferred IFR routing.

Catch Points for Airports Located Outside HAR Phase I Expansion Airspace

This section lists exit points for aircraft destined to specific destinations which are outside the HAR Phase I airspace.

Atlanta Terminal Area	Aircraft through ZME airspace from ZKC airspace east of FAM, Pless Q19 BNA or Aircraft through ZME airspace from ZKC airspace west of FAM, ARG Q26 DEVAC or MEM or Aircraft through ZME airspace from ZID airspace west of a line from VHP to BWG, BNA or Aircraft through ZME airspace from ZID airspace east of a line from VHP to BWG, BWG or Aircraft through ZME airspace from ZFW airspace, MEM or MEI HONIE (RNAV)–STAR or PATYN HONIE (RNAV)–STAR

Baltimore–Washington*	GIJ, GEP, FLM, IIU, BAE, VHP, WHETT, BNA or VUZ
Boston*	GEP, CRL, ECK, IIU, BNA or VUZ
Buffalo*	GEP, CRL
Hartford Bradley*	GEP, CRL
Canton–Akron*	GIJ, VHP, GEP
Charlotte	BNA, VUZ
Cincinnati Terminal Area	BNA, PXV or Aircraft north of SLC, JOT or Aircraft over or south of SLC, ENL or SLC or SFO departures, ENL, JOT
Cleveland Terminal Area*	OBK
Detroit Terminal Area	BAE MKG POLAR–STAR or VHP FWA MIZAR–STAR
Detroit Young	VHP FWA or LAN SPRTN–STAR
Indianapolis Terminal Area	BIB, SPI, JOT
Louisville	ENL, MEM
Newark*	GEP, VHP, FLM, IIU, BNA, VUZ or IOW GIJ J554 CRL J584 SLT FQM
New York Kennedy*	GEP, VHP, FLM, IIU, BNA, VUZ or DBQ J94 PMM J70 LVZ LENDY–STAR
New York LaGuardia*	GIJ, GEP, VHP, BAE, FLM, IIU, BNA, VUZ
Philadelphia Terminal Area*	GIJ, GEP, VHP, BAE, WHETT, BNA, VUZ
Pittsburgh Terminal Area*	VHP, GIJ, BAE, GEP
Pontiac	LFD, LAN, VHP, FWA, GEP
Providence	JHW, HEMDI, CESNA, GEP, GRB, TVC, ASP, VHP, IIU, BNA, VUZ
Raleigh–Durham	FLM, IIU, BNA, VUZ
Toronto Terminal Area	ECK, SVM, SSM, GEP
Teterboro*	GEP, VHP, CRL, BNA, VUZ
Washington Dulles/National*	GIJ, GEP, FLM, IIU, BAE, VHP, WHETT, BNA, VUZ
White Plains*	GEP, VHP, CRL, FLM, IIU, BNA, VUZ
Willow Run*	LAN, LFD, VHP, FWA, GEP

*Eastbound aircraft over flying ZMP center airspace entering Toronto center airspace, file direct SSM or via J63, J522, Q505, Q504, Q502, Q501
or
Entering ZAU or ZOB airspace from north of DPR J16 MCW, GEP
or
Entering ZAU or ZOB airspace from or south of DPR J16 MCW, CRL.

Catch Points for Airports Located Within (below) HAR Phase I Expansion Airspace

This section lists exit points for aircraft destined to airports which are below HAR Phase I airspace.

Albuquerque Terminal Area	CURLY CURLY–STAR or ESPAN FRIHO–STAR or LAVAN LAVAN–STAR or FTI FRIHO–STAR or MIERA MIERA–STAR
Austin Terminal Area	Aircraft west of a north–south line at LFK, BLEWE or Aircraft east of a north–south line at LFK,IDU or LLO
Boca Raton, FL	CEW DEFUN Q112 INPIN SHDAY (RNAV)–STAR Aircraft through ZHU remain south of ZME and ZTL airspace or DEFUN Q112 INPIN SHDAY (RNAV)–STAR Aircraft through ZHU remain south of ZME and ZTL airspace or SZW INPIN SHDAY (RNAV)–STAR
Chicago Midway	CVA MOTIF–STAR or PIA MOTIF–STAR or DBQ CVA MOTIF–STAR or LMN MOTIF–STAR
Chicago O'Hare Terminal Area	GEP DLL MSN JVL JANESVILLE–STAR or TVC PULLMAN–STAR or FOD DBQ JVL JANESVILLE–STAR or MCW JANESVILLE–STAR or GCK IRK BRADFORD–STAR
Dallas/Fort Worth Terminal Area	IRW, LOSZY, FSM, LIT, SQS, MLU, AEX, JUMBO, TQA, TURKI, HEATR Aircraft through ZME airspace from north and west of PXV, RZC, Q23 FSM or Aircraft through ZME airspace from east of PXV, PXV Q25 MEEOW or Aircraft through ZME airspace from J6 down to, but not including J52, LIT, SQS or Aircraft through ZME airspace from J52 and south of J52, SQS

Denver Terminal Area	OATHE DANDD–STAR or HGO QUAIL–STAR or LOPEC–STAR or ALS LARKS–STAR or HBU POWDR–STAR or EKR TOMSN–STAR or CHE TOMSN–STAR or BFF LANDR–STAR or LBF SAYGE–STAR or HCT SAYGE–STAR or RSK LARKS–STAR or LAA QUAIL–STAR or GCK J154 RYLIE DANDD–STAR or OCS J154 ALPOE RAMMS–STAR or YANKI J114 SNY LANDR–STAR or Aircraft filed BIL or east, MBW RAMMS–STAR
Ft Lauderdale or Ft Lauderdale Executive	CEW DEFUN Q104 PIE SWAGS (RNAV)–STAR Aircraft through ZHU airspace remain south ZME and ZTL airspace or SZW HEVVN Q104 PIE SWAGS (RNAV)–STAR
Houston Bush	CRP, CVE, LLO, LUKIY, SAT or Aircraft south and east of LLA, JEPEG or MISLE Q40 AEX or Aircraft north and east of SJI, SJI or Aircraft east of PXV, PXV Q31 DHART SWB or Aircraft north and west of PXV, PROWL Q33 DHART SWB
Houston Hobby	CRP, ELLVR, SAT, SWB or Aircraft south and east of GIRLY, KCEEE or Aircraft north and east of SJI, SJI or BESOM Q38 ROKIT ROKIT–STAR or Aircraft east of PXV, PXV Q29 HARES SWB or Aircraft north and west of PXV, PROWL Q33 DHART SWB
Jacksonville	GADAY ZOOSS TAY Aircraft through ZHU airspace remain south of ZME and ZTL airspace or ZOOSS TAY

John Wayne–Orange County	HEC, PGS, BLD or Aircraft south of TBC from ZAB airspace, HIPPI
Kansas City Terminal Area	LMN BRAYMER–STAR or PWE ROBINSON–STAR or EMP JHAWK–STAR
Las Vegas	DILCO, LIDAT, IGM or Aircraft over PGA or north of PGA KSINO or Aircraft south of PGA, PGS, LYNSY
Los Angeles Terminal Area	Aircraft North of TBC, HEC, PGS or Aircraft South of TBC from ZAB airspace, HIPPI, MESSI
Miami Terminal Area	CEW DEFUN Q104 CYY DEEDS (RNAV)–STAR Aircraft through ZHU airspace remain south ZME and ZTL airspace or SZW HEVVN Q104 CYY DEEDS (RNAV)–STAR
Minneapolis Terminal Area	Aircraft from north, west, south, FAR GOPHER–STAR or RWF SKETR–STAR or ALO KASPR–STAR or BRD GOPHER–STAR or BAE EAU CLAIRE–STAR or FOD TWOLF–STAR
Memphis Terminal Area	ARG, BWG, FSM, PXV, LIT, RZC, SQS, VUZ, BNA, GQO, ELD
Naples, FL	CEW DEFUN Q104 PLYER PIKKR (RNAV)–STAR Aircraft through ZHU AIRSPACE remain south of ZME and ZTL airspace or SZW HEVVN Q104 PLYER PIKKR (RNAV)–STAR
Nashville	CCT, GHM, GUITR, TINGS, VOLLS
New Orleans Terminal Area	BLUEZ, GPT, LCH, MCB, TBD, FATSO
Oakland	ILA or KATTS PAMMY or Aircraft over or south of a line ILC J16 DVC REANA KATTS PAMMY or Aircraft from north of ILC, JOPER PAMMY or KATTS PAMMY or Aircraft over or south of ILC, REANA KATTS PAMMY
Orlando Terminal Area	GADAY Q108 CLAWZ LEESE–STAR Aircraft through ZHU airspace remain south of ZME/ZTL airspace or OTK LEESE–STAR

Palm Beach, FL	CEW DEFUN Q112 INPIN GULLO (RNAV)–STAR Aircraft through ZHU airspace remain south of ZME and ZTL airspace or SZW INPIN GULLO (RNAV)–STAR
Phoenix	CORKR DRK or Aircraft from ZDV airspace, GUP or Aircraft from ZAB airspace, ZUN, MOHAK, SSO or VYLLA TUS
Phoenix Satellites	FLG, SSO, MOHAK or VYLLA, TUS
Portland, OR Terminal Area	ARNIT BONVL–STAR or LARNO BONVL–STAR or MOXEE MOXEE–STAR
St. Louis Terminal Area	SGF TRAKE–STAR or BUM TRAKE–STAR or ANX TRAKE–STAR or LMN IRK RIVRS–STAR or RBS VANDALIA–STAR
Salt Lake City Terminal Area	JNC J12 HELPR SPANE–STAR or EKR MTU SPANE–STAR or BCE DTA–TCH or MLF DTA–TCH or BVL BONNEVILLE–STAR or BYI BEARR–STAR or PIH BEARR–STAR or DBS BRIGHAM CITY–STAR or JAC BRIGHAM CITY–STAR or BPI BRIGHAM CITY–STAR or OCS BRIGHAM CITY–STAR
San Diego Terminal Area	EED, LAX, GBN
Santa Ana	HEC, PGS, BLD, HIPPI
San Antonio Terminal Area	IDU, CSI, JCT, LLO, CRP, LRD or West of a north–south line at LFK, BLEWE or East of a north–south line at LFK, IDU

San Francisco	FMG GOLDEN GATE–STAR or MVA MODESTO–STAR or ENI GOLDEN GATE–STAR or OAL MODESTO–STAR or South of a line ILC to DVC, REANA KATTS OAL MODESTO–STAR
San Jose	FMG HYP EL NIDO–STAR or OAL HYP EL NIDO–STAR or ENI GOLDEN GATE–STAR or South of a line ILC to DVC, REANA KATTS KICHI CANDA EL NIDO–STAR
Seattle Terminal Area	Aircraft from northeast, southeast, south, TEMPL GLASR–STAR or SUNED CHINS–STAR or BTG OLMYPIA–STAR
Southwest Florida Airports RSW and FMY	CEW DEFUN Q104 SWABE JOSFF–STAR Aircraft through ZHU airspace remain south of ZME and ZTL airspace or SZW HEVVN Q104 SWABE JOSFF–STAR
Tampa Terminal Area	CEW DEFUN Q104 HEVVN DARBS–STAR Aircraft through ZHU airspace remain south of ZME and ZTL airspace or SZW DARBS–STAR
Tucson	DRK PXR or MOHAK GBN

VISUAL FLIGHT RULES (VFR) WAYPOINTS

VFR Waypoint names consist of five letters beginning with ''VP''. Stand–alone VFR Waypoints are portrayed on VFR Charts using the same four–point star symbol currently used for Instrument Flight Rules (IFR) Waypoints.

VFR Waypoints collocated with Visual Checkpoints (Visual Reporting Points) are portrayed with a Visual Check Point flag. The VFR Waypoint name is shown in parentheses adjacent to the Visual Check Point name.

VFR Waypoint names are not intended to be pronounceable and shall not be used in ATC communications.

CAUTION: GPS accuracy necessitates extra vigilance for other aircraft when navigating near any fix retrieved from a GPS database.

BALTIMORE–WASHINGTON TERMINAL AREA CHART/FLYWAY CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPAXI	_____	N38°34.57′/W076°20.38′
VPONX	_____	N39°06.65′/W076°55.92′
VPOOP	_____	N38°56.32′/W076°36.90′

BOSTON HELICOPTER CHART

VPBAY	_____	N42°16.17′/W070°49.48′
VPBLT	_____	N42°19.67′/W070°53.40′
VPCGS	_____	N42°22.08′/W071°03.13′
VPEVS	_____	N42°23.52′/W071°04.10′
VPFEN	_____	N42°12.58′/W071°08.88′
VPFRE	_____	N42°25.03′/W071°12.32′
VPGVL	_____	N42°21.88′/W070°52.18′
VPHAM	_____	N42°30.13′/W071°07.15′
VPPIK	_____	N42°20.37′/W071°15.93′
VPQUA	_____	N42°12.10′/W071°04.78′
VPQUB	_____	N42°12.60′/W070°59.83′
VPSPF	_____	N42°24.20′/W071°09.47′
VPTOB	_____	N42°31.42′/W070°59.82′
VPWAN	_____	N42°36.88′/W071°19.45′

BOSTON TERMINAL AREA CHART

VPCOH	Cohasset	N42°13.58′/W070°48.94′
VPCUT	Cuttyhunk Harbor	N41°25.50′/W070°55.03′
VPFRA	Framingham Shopping Center	N42°18.16′/W071°23.65′
VPHOL	Woods Hole	N41°31.06′/W070°40.60′
VPHUL	Hull	N42°18.20′/W070°55.30′
VPLPT	Nantucket Great Point	N41°23.41′/W070°02.78′
VPNED	Needham Towers	N42°18.51′/W071°14.64′
VPPEA	Peabody Shopping Center	N42°32.52′/W070°56.69′
VPROC	Rockingham Race Track	N42°46.29′/W071°13.57′
VPSCI	Scituate	N42°11.89′/W070°43.69′
VPTPT	Nantucket Third Point	N41°18.51′/W070°03.37′
VPTUC	Tuckernuck	N41°18.31′/W070°15.43′
VPWAK	Wakefield	N42°30.72′/W071°05.24′
VPWAN	Wang Towers	N42°36.88′/W071°19.45′

CHARLOTTE SECTIONAL CHART

VPATO	_____	N34°37.37′/W076°31.47′
VPAVA	_____	N34°57.00′/W077°16.50′
VPBFE	_____	N32°16.38′/W080°47.50′
VPBRA	_____	N36°13.75′/W076°08.08′
VPGCE	_____	N36°03.90′/W076°36.42′
VPGHI	_____	N35°15.30′/W075°31.25′
VPGIO	_____	N35°32.50′/W076°37.33′
VPKJU	_____	N35°26.58′/W076°10.22′
VPLMN	_____	N34°55.43′/W077°46.42′
VPMAB	_____	N34°42.20′/W077°03.50′
VPNPO	ISLE OF PALMS	N32°47.78′/W079°46.45′
VPOKY	_____	N35°06.53′/W075°59.17′
VPREP	_____	N32°33.98′/W080°21.82′
VPRRS	_____	N33°25.45′/W079°07.60′
VPUMO	_____	N35°35.63′/W075°28.08′
VPWZO	_____	N36°00.87′/W075°40.07′
VPZIE	_____	N32°01.62′/W080°53.42′

CHICAGO SECTIONAL CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPCOH	_____	N31°49.35′/W081°51.07′

DENVER TERMINAL AREA CHART/FLYWAY CHART

VPBEN	_____	N39°44.28′/W104°26.00′
VPFTG	_____	N39°44.35′/W104°32.75′
VPNIC	NORTH INTERCHANGE	N39°58.90′/W104°59.27′

HOUSTON TERMINAL AREA CHART/FLYWAY CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPBWY	_____	N29°46.25′/W095°09.24′
VPDTN	_____	N29°46.59′/W095°22.01′
VPGLA	_____	N30°08.32′/W095°06.62′
VPGLB	_____	N30°07.80′/W094°55.70′
VPKTY	_____	N29°47.05′/W095°44.92′
VPPLN	_____	N30°08.80′/W095°50.42′
VPRSN	_____	N29°30.00′/W095°41.00′
VPSND	_____	N29°23.13′/W095°28.86′
VPSNT	_____	N29°49.29′/W094°53.94′
VPTNE	_____	N29°47.48′/W095°03.34′
VPTNW	_____	N29°47.06′/W095°33.81′
VPTRK	_____	N29°24.06′/W095°10.44′

JACKSONVILLE SECTIONAL CHART

VPAFI	_____	N31°49.35′/W081°51.07′
VPAFY	_____	N30°07.00′/W081°21.33′
VPBEC	_____	N29°46.25′/W081°15.10′
VPCJA	_____	N29°30.00′/W081°06.00′
VPCKY	_____	N28°46.50′/W082°34.00′
VPCNY	_____	N28°30.00′/W080°45.00′
VPDAD	DADE CITY	N28°22.57′/W082°11.25′
VPDAR	_____	N31°22.38′/W081°24.13′
VPDFI	_____	N29°00.17′/W081°20.85′
VPDUT	_____	N27°37.70′/W082°09.10′
VPEAR	CLEARWATER BEACH	N27°58.67′/W082°49.83′
VPEGV	_____	N29°39.97′/W081°24.87′
VPFFU	_____	N28°57.08′/W081°00.33′
VPGPE	ST PETE BEACH	N27°43.50′/W082°44.67′
VPHAA	_____	N30°04.02′/W083°40.02′
VPHUC	_____	N28°19.87′/W082°43.77′
VPIWA	MIDWAY	N31°48.33′/W081°25.85′
VPJMY	_____	N29°26.92′/W081°18.27′
VPKER	LAKE PARKER	N28°04.00′/W081°56.00′
VPLEV	_____	N28°48.00′/W080°52.00′
VPLJA	_____	N29°00.00′/W080°51.00′
VPMAI	_____	N30°50.02′/W084°56.63′
VPTLH	_____	N30°32.70′/W083°52.22′
VPXZY	_____	N29°35.00′/W083°10.00′
VPYIW	_____	N30°42.28′/W081°27.25′
VPZIE	_____	N32°01.62′/W080°53.42′

KANSAS CITY SECTIONAL CHART

VPAGO	_____	N37°50.33′/W090°29.03′
VPBEK	_____	N37°15.07′/W092°30.67′
VPDEN	_____	N37°46.75′/W092°19.20′
VPENE	_____	N37°44.75′/W091°55.78′
VPESS	_____	N36°59.48′/W091°00.88′
VPFME	_____	N37°41.00′/W092°38.33′
VPGXY	_____	N37°15.50′/W091°40.17′
VPMBE	_____	N37°11.08′/W090°27.92′
VPMKE	_____	N37°24.47′/W092°40.00′
VPROV	_____	N38°01.72′/W091°12.81′
VPUTT	_____	N37°52.05′/W092°01.20′

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPWOC	_____	N37°18.03′/W092°18.63′
VPWRO	_____	N37°39.12′/W091°45.68′
VPXIZ	_____	N37°26.60′/W092°05.42′

KANSAS CITY TERMINAL AREA CHART

VPATN	ATCHISON	N39°33.62′/W095°07.65′
VPBGS	BLUE SPRINGS	N39°01.82′/W094°16.32′
VPBSP	BONNER SPRINGS	N39°03.78′/W094°53.10′
VPCHB	CHOUTEAU BRIDGE	N39°08.77′/W094°32.03′
VPDSO	DE SOTO	N38°58.68′/W094°58.48′
VPESG	EXCELSIOR SPRINGS	N39°20.68′/W094°13.77′
VPGTB	GARRETSBURG	N39°40.92′/W094°41.45′
VPLAT	LATHROP WATER TANK	N39°32.87′/W094°20.00′
VPLEN	LENEXA	N38°57.77′/W094°43.68′
VPLVL	LONGVIEW LAKE	N38°54.63′/W094°28.28′
VPMCL	MC LOUTH	N39°11.65′/W095°12.50′
VPNHA	NASHUA	N39°17.83′/W094°34.80′
VPSCX	SPORTS COMPLEX	N39°03.00′/W094°29.02′
VPSKR	SUGAR CREEK REFINERY	N39°07.00′/W094°27.02′
VPSPK	SWOPE PARK	N39°00.47′/W094°31.93′
VPTSK	TWIN STACKS	N39°09.05′/W094°38.22′
VPWOF	WORLDS OF FUN	N39°10.42′/W094°29.12′

KLAMATH FALLS SECTION CHART

VPORO	_____	N43°57.38′/W123°02.22′

LOS ANGELES HELICOPTER CHART

VPANA	_____	N33°44.43′/W117°50.03′
VPART	MAGNOLIA	N33°51.45′/W117°58.92′
VPAUT	HWY 91 & 55	N33°50.63′/W117°49.57′
VPBOB	_____	N33°59.60′/W117°21.45′
VPCAR	_____	N33°49.90′/W118°17.23′
VPCNG	CONEJO GRADE US HWY 101	N34°12.54′/W118°59.61′
VPCOR	_____	N33°52.90′/W117°32.95′
VPCRX	_____	N34°01.40′/W117°44.88′
VPCSU	CSU CHANNEL ISLANDS	N34°09.76′/W119°02.53′
VPDOW	_____	N33°56.47′/W118°05.80′
VPELA	_____	N34°00.98′/W118°10.35′
VPETY	_____	N33°38.70′/W117°44.12′
VPFCB	_____	N34°02.03′/W118°01.63′
VPFPL	OXNARD FINANCIAL PLAZA	N34°13.71′/W119°10.39′
VPGOL	_____	N34°09.33′/W118°17.37′
VPIMP	_____	N33°55.85′/W118°16.85′
VPKAT	_____	N33°48.23′/W117°54.22′
VPKEL	_____	N34°03.92′/W117°48.40′
VPLAC	_____	N34°03.75′/W118°14.93′
VPLLU	_____	N34°03.85′/W117°17.82′
VPLQM	QUEEN MARY	N33°45.17′/W118°11.37′
VPLRT	SANTA ANITA RACE TRACK	N34°08.45′/W118°02.65′
VPLVT	VINCENT THOMAS BRIDGE	N33°44.97′/W118°16.32′
VPMDR	_____	N33°59.27′/W118°23.97′
VPNEW	NEWHALL PASS	N34°20.18′/W118°30.72′
VPNUY	_____	N34°09.63′/W118°28.18′
VPPCH	_____	N33°28.07′/W117°40.32′
VPPKC	_____	N34°03.32′/W118°12.83′
VPPOR	_____	N34°00.10′/W117°50.12′
VPRRT	_____	N33°59.37′/W118°16.83′
VPSEP	_____	N34°05.80′/W118°28.63′
VPSFR	_____	N34°17.45′/W118°28.07′
VPSTC	SATICOY BRIDGE	N34°16.62′/W119°08.34′
VPSTK		N34°13.97′/W118°24.60′

LOS ANGELES SECTIONAL CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPCNG	CONEJO GRADE US HWY 101	N34°12.54′/W118°59.61′
VPCSU	CSU CHANNEL ISLANDS	N34°09.76′/W119°02.53′
VPFPL	OXNARD FINANCIAL PLAZA	N34°13.71′/W119°10.39′
VPSTC	SATICOY BRIDGE	N34°16.62′/W119°08.34′

LOS ANGELES TERMINAL AREA CHART/FLYWAY CHART

VPCNG	CONEJO GRADE US HWY 101	N34°12.54′/W118°59.61′
VPCSU	CSU CHANNEL ISLANDS	N34°09.76′/W119°02.53′
VPGTY	GETTY CENTER	N34°04.84′/W118°28.66′
VPLBP	BANNING PASS	N33°56.05′/W116°59.63′
VPLCC	CHAFFEY COLLEGE	N34°08.87′/W117°34.33′
VPLCP	CAJON PASS	N34°18.07′/W117°27.68′
VPLDL	DISNEYLAND	N33°48.72′/W117°55.13′
VPLDP	DANA POINT	N33°27.62′/W117°42.87′
VPLDS	DODGER STADIUM	N34°04.42′/W118°14.42′
VPLFX	91/605 INTERCHANGE	N33°52.38′/W118°06.08′
VPLGP	GRIFFITH PARK OBSERVATORY	N34°07.10′/W118°18.02′
VPLHF	110/405 FWYS	N33°51.42′/W118°17.10′
VPLHP	HUNTINGTON PIER	N33°39.32′/W118°00.25′
VPLKH	KING HARBOR	N33°50.75′/W118°23.88′
VPLLC	L.A. COLISEUM	N34°00.83′/W118°17.27′
VPLLM	LAKE MATHEWS	N33°50.58′/W117°26.85′
VPLMM	MAGIC MOUNTAIN	N34°26.20′/W118°36.28′
VPLMS	MILE SQUARE PARK	N33°43.40′/W117°56.77′
VPLPD	PRADO DAM	N33°53.40′/W117°38.48′
VPLPP	PACIFIC PALISADES	N34°02.13′/W118°32.15′
VPLQM	QUEEN MARY	N33°45.17′/W118°11.37′
VPLRB	ROSE BOWL	N34°09.67′/W118°10.05′
VPLRT	SANTA ANITA RACE TRACK	N34°08.45′/W118°02.65′
VPLSA	SANTA ANA CANYON	N33°52.03′/W117°42.68′
VPLSB	SANTA FE FLOOD BASIN	N34°07.72′/W117°57.30′
VPLSC	STATE COLLEGE	N33°52.97′/W117°53.13′
VPLSF	SAN FERNANDO RESERVOIR	N34°17.87′/W118°29.00′
VPLSP	SIGNAL PEAK	N33°36.33′/W117°48.63′
VPLSR	HAWTHORNE & 405 FREEWAY	N33°53.07′/W118°21.13′
VPLSS	SANTA SUSANA PASS	N34°16.00′/W118°38.43′
VPLTW	TUJUNGA WASH & FOOTHILL	N34°16.40′/W118°20.30′
VPLVT	VINCENT THOMAS BRIDGE	N33°44.97′/W118°16.32′
VPLWT	WATER TANK	N34°10.82′/W118°46.27′
VPNEW	NEWHALL PASS	N34°20.18′/W118°30.72′
VPSTC	SATICOY BRIDGE	N34°16.62′/W119°08.34′

MIAMI SECTIONAL CHART

VPACH	HOLLYWOOD BEACH	N26°00.92′/W080°06.93′
VPBOV	_____	N27°57.00′/W080°46.75′
VPCLE	_____	N26°27.07′/W082°00.88′
VPCTE	_____	N26°09.28′/W081°20.70′
VPDAD	DADE CITY	N28°22.57′/W082°11.25′
VPDUT	_____	N27°37.70′/W082°09.10′
VPDZE	_____	N27°19.00′/W080°44.17′
VPEAR	CLEARWATER BEACH	N27°58.67′/W082°49.83′
VPEDY	ANDYTOWN TOLLGATE	N26°08.78′/W080°28.00′
VPFAH	_____	N26°25.40′/W081°29.67′
VPGPE	ST PETE BEACH	N27°43.50′/W082°44.67′
VPHRO	_____	N27°05.97′/W082°12.20′
VPHUC	_____	N28°19.87′/W082°43.77′
VPIBR	_____	N27°12.47′/W081°40.22′
VPKER	LAKE PARKER	N28°04.00′/W081°56.00′
VPKOE	_____	N24°40.08′/W081°20.55′
VPLYY	_____	N24°49.07′/W080°49.17′
VPMBO	GULFSTREAM PARK	N25°58.57′/W080°08.17′
VPOBA	PUMPING STATION	N26°28.30′/W080°26.75′
VPRBI	_____	N25°50.67′/W080°55.18′
VPRNL	RANGER STATION	N25°22.92′/W080°36.58′
VPWMO	_____	N27°03.00′/W080°35.00′

MIAMI TERMINAL AREA CHART/FLYWAY CHART

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPACH	HOLLYWOOD BEACH	N26°00.92′/W080°06.93′
VPEDY	ANDYTOWN TOLLGATE	N26°08.78′/W080°28.00′
VPMBO	GULFSTREAM PARK	N25°58.57′W080°08.17′
VPOBA	PUMPING STATION	N26°28.30′/W080°26.75′
VPRBI	_____	N25°50.67′/W080°55.18′
VPRNL	RANGER STATION	N25°22.92′/W080°36.58′

NEW ORLEANS SECTIONAL CHART

VPGPT	_____	N30°25.95′/W089°05.62′
VPLIP	PHILLIPS INLET	N30°16.23′/W085°59.25′
VPMAI	_____	N30°50.02′/W084°56.63′
VPMOB	_____	N30°23.00′/W088°31.72′
VPRAM	_____	N30°18.95′/W089°35.88′
VPRER	_____	N30°13.87′/W085°20.67′
VPRIV	_____	N30°54.85′/W087°57.82′
VPSAW	_____	N30°49.65′/W089°07.42′
VPTHR	_____	N30°19.93′/W087°08.50′

NEW YORK HELICOPTER CHART

VPJAY	_____	N40°59.00′/W073°07.00′
VPLYD	_____	N40°57.37′/W073°29.59′
VPROK	_____	N40°52.70′/W073°44.24′

PHOENIX TERMINAL AREA CHART/FLYWAY CHART

VPALL	ALLENVILLE	N33°20.97′/W112°35.20′
VPAQU	AQUEDUCT PUMPING STATION	N33°40.05′/W112°41.38′
VPARM	ARROWHEAD MALL	N33°38.52′/W112°13.48′
VPAWG	AHWATUKEE GOLF COURSE	N33°19.98′/W111°59.08′
VPAZM	ARIZONA MILLS	N33°23.43′/W111°57.88′
VPBAR	BARTLETT DAM	N33°49.10′/W111°37.92′
VPCCC	COUNTRY CLUB & CANAL	N33°30.73′/W111°50.37′
VPCNL	CANAL	N33°33.23′/W111°46.89°
VPFRB	FIREBIRD LAKE	N33°16.35′/W111°58.10′
VPFTN	FOUNTAIN HILLS	N33°36.12′/W111°42.72′
VPGLX	GILA CROSSING	N33°16.55′/W112°10.08′
VPGPP	GLENDALE POWER PLANT	N33°33.27′/W112°13.00′
VPMAR	MARICOPA	N33°03.42′/W112°02.88′
VPMHS	MESQUITE HIGH SCHOOL	N33°20.53′/W111°49.58′
VPNRV	NEW RIVER	N33°55.08′/W112°08.45′
VPNTT	NORTH TEST TRACK	N33°03.50′/W111°55.83′
VPPIR	PIR	N33°22.52′/W112°18.90′
VPQTR	QUINTERO GOLF COURSE	N33°49.53′/W112°23.58′
VPRVC	RIO VERDE COMMUNITY	N33°44.37′/W111°39.62′
VPSMC	SOUTH MOUNTAIN COLLEGE	N33°23.02′/W112°02.12′
VPSQP	SQUAW PEAK	N33°32.83′/W112°01.27′
VPSSS	SUPERSTITION SPRINGS MALL	N33°23.50′/W111°41.37′
VPSTN	SANTAN MOUNTAINS	N33°09.23′/W111°40.92′
VPSTT	SOUTH TEST TRACK	N32°56.25′/W111°59.67′
VPZZZ	_____	N33°20.18′/W111°26.53′

ST LOUIS TERMINAL AREA CHART/FLYWAY CHART

VPAGN	TV ANTENNA	N38°32.08′/W090°22.42′
VPBPE	_____	N38°23.80′/W090°20.38′
VPCJY	HOLIDAY SHORES	N38°55.00′/W089°56.00′
VPCOJ	WINFIELD DAM	N39°00.28′/W090°41.23′
VPDFA	JEFFERSON BARRACKS BRIDGE	N38°29.18′/W090°16.47′
VPEAZ	BUSCH STADIUM	N38°37.43′/W090°11.55′
VPEDZ	WATER TANKS	N38°45.30′/W090°34.87′
VPEGR	GAS TANKS	N38°35.80′/W090°19.32′
VPEOX	ST PETERS	N38°47.17′/W090°39.25′

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPFAI	HOWELL ISLAND	N38°40.00′/W090°43.00′
VPFFY	_____	N38°55.37′/W090°17.30′
VPGPF	_____	N38°35.60′/W090°26.92′
VPGVI	_____	N38°32.30′/W090°27.80′
VPHRQ	CHAIN OF ROCKS BRIDGE	N38°45.88′/W090°10.42′
VPIBO	WATERLOO	N38°20.00′/W090°09.00′
VPJMU	HORSESHOE LAKE	N38°41.00′/W090°05.00′
VPKNY	PACIFIC	N38°29.00′/W090°44.00′
VPLES	ST CHARLES	N38°47.00′/W090°30.00′
VPLIW	SIX FLAGS	N38°30.67′/W090°40.47′
VPLXU	GATEWAY ARCH	N38°37.50′/W090°11.00′
VPNSY	WOOD RIVER REFINERIES	N38°50.00′/W090°05.00′
VPNZY	WENTZVILLE	N38°48.83′/W090°50.98′
VPRAZ	JERSEYVILLE	N39°07.00′/W090°20.00′
VPRMO	FOREST PARK	N38°38.00′/W090°17.00′
VPWKO	COLUMBIA	N38°27.00′/W090°12.00′
VPXXI	MILLSTADT	N38°27.50′/W090°05.68′
VPYID	MOSENTHEIN ISLAND	N38°43.00′/W090°12.25′

SALT LAKE CITY HELICOPTER CHART

VPAIR	SALTAIR	N40°44.85′/W112°11.22′
VPBEE	SOUTH INTERCHANGE	N40°38.18′/W111°54.23′
VPBRN	BARN	N40°54.28′/W112°10.15′
VPCAP	STATE CAPITOL	N40°46.67′/W111°53.25′
VPCHS	_____	N40°42.28′/W112°05.92′
VPCOP	BINGHAM COPPER MINE	N40°31.38′/W112°09.00′
VPCWY	CAUSEWAY	N41°05.37′/W112°07.17′
VPCYN	PARLEYS CANYON	N40°42.67′/W111°48.10′
VPFPC	FREE PORT CENTER	N41°05.92′/W112°02.27′
VPFPK	FRANCIS PEAK	N41°01.98′/W111°50.30′
VPGFS	GARFIELD STACK	N40°43.28′/W112°11.88′
VPHVE	SPAGHETTI BOWL	N40°43.50′/W111°54.22′
VPJRT	JORDAN RIVER TEMPLE	N40°35.02′/W111°55.58′
VPKSL	KSL ANTENNA	N40°46.80′/W112°05.80′
VPLGN	LAGOON AMUSEMENT PARK	N40°59.08′/W111°53.57′
VPMDH	MCKAY DEE HOSPITAL	N41°11.50′/W111°57.08′
VPMMT	MICROWAVE TOWERS	N40°48.50′/W111°53.37′
VPMSH	_____	N41°01.67′/W112°02.47′
VPNSL	_____	N40°50.15′/W111°54.90′
VPNTP	_____	N41°03.57′/W112°14.23′
VPOGE	GRAIN ELEVATOR	N41°13.13′/W112°00.45′
VPOPS	POWER STATION	N41°20.38′/W112°02.78′
VPPEN	STATE PRISON	N40°29.88′/W111°53.62′
VPPPT	PROMONTORY POINT	N41°12.28′/W112°25.73′
VPPTM	POINT OF THE MOUNTAIN	N40°27.42′/W111°54.83′
VPPVO	PROVO CANYON	N40°18.77′/W111°39.45′
VPRWY	_____	N40°48.48′/W112°00.33′
VPSLC	I–15/I–80 INTERCHANGE	N40°45.83′/W111°54.85′
VPTIP	SOUTH TIP	N40°50.93′/W112°10.92′
VPWBR	WEBER CANYON	N41°08.17′/W111°54.83′
VPWBT	_____	N40°38.00′/W112°03.33′

SALT LAKE CITY TERMINAL AREA CHART/FLYWAY CHART

VPAIR	SALTAIR	N40°44.85′/W112°11.22′
VPBEE	SOUTH INTERCHANGE	N40°38.18′/W111°54.23′
VPBRN	BARN	N40°54.28′/W112°10.15′
VPCAP	STATE CAPITOL	N40°46.67′/W111°53.25′
VPCHS	_____	N40°42.28′/W112°05.92′
VPCOP	BINGHAM COPPER MINE	N40°31.38′/W112°09.00′
VPCVI	CENTERVILLE INTERCHANGE	N40°55.30′/W111°53.43′
VPCWY	CAUSEWAY	N41°05.37′/W112°07.17′
VPCYN	PARLEYS CANYON	N40°42.67′/W111°48.10′
VPFPC	FREE PORT CENTER	N41°05.92′/W112°02.27′
VPFPK	FRANCIS PEAK	N41°01.98′/W111°50.30′
VPGFS	GARFIELD STACK	N40°43.28′/W112°11.88′

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPHVE	SPAGHETTI BOWL	N40°43.50′/W111°54.22′
VPJRT	JORDAN RIVER TEMPLE	N40°35.02′/W111°55.58′
VPKSL	KSL ANTENNA	N40°46.80′/W112°05.80′
VPLGN	LAGOON AMUSEMENT PARK	N40°59.08′/W111°53.57′
VPMDH	MCKAY DEE HOSPITAL	N41°11.50′/W111°57.08′
VPMMT	MICROWAVE TOWERS	N40°48.50′/W111°53.37′
VPMSH	_____	N41°01.67′/W112°02.47′
VPNSL	_____	N40°50.15′/W111°54.90′
VPNTP	_____	N41°03.57′/W112°14.23′
VPOGE	GRAIN ELEVATOR	N41°13.13′/W112°00.45′
VPOPS	POWER STATION	N41°20.38′/W112°02.78′
VPPEN	STATE PRISON	N40°29.88′/W111°53.62′
VPPPT	PROMONTORY POINT	N41°12.28′/W112°25.73′
VPPTM	POINT OF THE MOUNTAIN	N40°27.42′/W111°54.83′
VPPVO	PROVO CANYON	N40°18.77′/W111°39.45′
VPRWY	_____	N40°48.48′/W112°00.33′
VPSLC	I–15/I–80 INTERCHANGE	N40°45.83′/W111°54.85′
VPTIP	SOUTH TIP	N40°50.93′/W112°10.92′
VPUOU	U OF U EVENTS CENTER	N40°45.73′/W111°50.28′
VPWBR	WEBER CANYON	N41°08.17′/W111°54.83′
VPWBT	_____	N40°38.00′/W112°03.33′
VPZOO	HOGLE ZOO	N40°45.00′/W111°48.95′

SAN DIEGO TERMINAL AREA CHART/FLYWAY CHART

VPLDP	DANA POINT	N33°27.62′/W117°42.87′
VPLSP	SIGNAL PEAK	N33°36.33′/W117°48.63′
VPOCN	_____	N33°14.15′/W117°26.63′
VPSBC	BARONA CASINO	N32°56.25′/W116°52.60′
VPSBL	_____	N33°05.18′/W117°18.55′
VPSBM	BLACK MOUNTAIN	N32°58.87′/W117°07.00′
VPSCF	_____	N32°48.55′/W117°09.17′
VPSCM	COWLES MOUNTAIN	N32°48.72′/W117°01.97′
VPSCP	CRYSTAL PIER	N32°47.77′/W117°15.42′
VPSCR	_____	N32°39.37′/W117°07.30′
VPSFB	IRON MOUNTAIN	N32°58.25′/W116°57.33′
VPSLJ	LAKE JENNINGS	N32°51.53′/W116°53.28′
VPSMB	_____	N32°45.57′/W117°12.22′
VPSMP	_____	N33°22.70′/W117°36.75′
VPSMS	MOUNT SOLEDAD	N32°50.40′/W117°15.10′
VPSMV	_____	N32°45.75′/W117°09.80′
VPSMW	MOUNT WOODSON	N33°00.52′/W116°58.23′
VPSOP	OTAY MESA PRISON	N32°35.82′/W116°55.28′
VPSOT	LOWER OTAY LAKE	N32°37.73′/W116°55.38′
VPSPL	SOUTH POINT LOMA	N32°39.90′/W117°14.55′
VPSPP	POWER PLANT	N33°08.25′/W117°20.23′
VPSQS	QUALCOMM STADIUM	N32°46.98′/W117°07.23′
VPSRT	DEL MAR RACE TRACK	N32°58.58′/W117°15.95′
VPSSM	SAN MIGUEL MOUNTAIN	N32°41.78′/W116°56.18′
VPSSV	SAN VICENTE ISLAND	N32°55.53′/W116°55.00′
VPSTP	TORREY PINES GOLF COURSE	N32°54.17′/W117°14.68′
VPSVA	_____	N33°11.48′/W117°16.38′

SAN FRANCISCO SECTIONAL CHART

VPKBG	KINGSBURY GRADE	N38°58.75′/W119°53.20′

SAN FRANCISCO TERMINAL AREA CHART/FLYWAY CHART

VPALT	ALTAMONT PASS	N37°44.35′/W121°35.42′
VPANT	ANTIOCH BRIDGE	N38°01.45′/W121°45.02′
VPBBR	BENICIA BRIDGE	N38°02.50′/W122°07.45′
VPCAL	CALAVERAS RESERVOIR	N37°28.16′/W121°48.93′
VPCBT	LAKE CHABOT	N37°43.68′/W122°06.94′
VPCOY	COYOTE HILLS	N37°32.50′/W122°05.06′
VPCQZ	CARQUINEZ BRIDGE	N38°03.66′/W122°13.52′
VPCRL	_____	N37°11.00′/W121°41.06′
VPCRY	CRYSTAL SPRINGS CAUSEWAY	N37°30.56′/W122°21.10′

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPDUB	DUBLIN	N37°42.06′/W121°55.36′
VPEMB	EMBASSY SUITES	N37°26.05′/W121°53.83′

WAYPOINT IDENT	COLLOCATED VFR CHECKPOINT	LOCATION
VPCSH	CAL STATE UNIVERSITY	N37°39.52′/W122°03.52′
VPDAM	DEL VALLE DAM	N37°36.91′/W121°44.78′
VPDLR	_____	N37°07.00′/W121°47.06′
VPDUB	DUBLIN	N37°42.06′/W121°55.36′
VPEMB	EMBASSY SUITES	N37°26.05′/W121°53.83′
VPGGF	GOLDEN GATE FIELDS	N37°53.07′/W122°18.71′
VPGIL	GILROY	N37°01.37′/W121°33.99′
VPHHH	HAMILTON	N38°03.58′/W122°30.66′
VPKGO	KGO	N37°31.58′/W122°06.10′
VPLEX	LEXINGTON RESERVOIR	N37°11.66′/W121°59.18′
VPMID	MID–SPAN SAN MATEO BRIDGE	N37°36.28′/W122°11.81′
VPMOR	MORMON TEMPLE	N37°48.46′/W122°11.95′
VPNUM	NUMMI PLANT	N37°29.56′/W121°56.58′
VPPAC	_____	N37°38.00′/W122°32.07′
VPPRU	PRUNEYARD	N37°17.33′/W121°56.01′
VPSAR	SARATOGA	N37°15.26′/W122°02.33′
VPSLA	SLAC/LINEAR ACCELERATOR	N37°24.75′/W122°14.35′
VPSTB	STINSON BEACH	N37°54.45′/W122°40.41′
VPSUN	SUNOL GOLF COURSE	N37°34.85′/W121°53.23′
VPUTC	U.T.C.	N37°13.93′/W121°41.35′
VPWAL	WALNUT CREEK	N37°53.78′/W122°04.30′
VPWAM	_____	N37°30.28′/W122°10.00′
VPWFR	CEMENT PLANT	N37°30.88′/W122°12.26′

TAMPA/ORLANDO TERMINAL AREA CHART/FLYWAY CHART

VPBOV	_____	N27°57.00′/W080°46.75′
VPCNY	_____	N28°30.00′/W080°45.00′
VPDAD	DADE CITY	N28°22.57′/W082°11.25′
VPDFI	_____	N29°00.17′/W081°20.85′
VPDUT	_____	N27°37.70′/W082°09.10′
VPEAR	CLEARWATER BEACH	N27°58.67′/W082°49.83′
VPFFU	_____	N28°57.08′/W081°00.33′
VPGPE	ST PETE BEACH	N27°43.50′/W082°44.67′
VPHUC	_____	N28°19.87′/W082°43.77′
VPKER	LAKE PARKER	N28°04.00′/W081°56.00′
VPLEV	_____	N28°48.00′/W080°52.00′
VPLJA	_____	N29°00.00′/W080°51.00′

WASHINGTON SECTIONAL CHART

VPACE	_____	N38°07.82′/W076°48.75′
VPAXI	_____	N38°34.57′/W076°20.38′
VPBRA	_____	N36°13.75′/W076°08.08′
VPGCE	_____	N36°03.90′/W076°36.42′
VPWZO	_____	N36°00.87′/W075°40.07′

VOR RECEIVER CHECKPOINTS AND VOR TEST FACILITIES (VOT)

The use of VOR airborne and ground checkpoints is explained in Aeronautical Information Manual, Basic Flight Information and ATC Procedures.

NOTE: Under columns headed ''Type of Checkpoint'' & ''Type of VOT Facility'' G stands for ground. A/ stands for airborne followed by figures (2300) or (1000–3000) indicating the altitudes above mean sea level at which the check should be conducted. Facilities are listed in alphabetical order, in the state where the checkpoints or VOTs are located.

ARIZONA

VOR RECEIVER CHECKPOINTS

Facility Name (Arpt Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag.	Dist. from Fac. N.M.	Checkpoint Description
Bard	116.8/BZA	A/2000	242	5.9	Over interstate 8 freeway crossing canal.
Drake (Ernest A. Love Fld)	114.1/DRK	A/7000	124	5.0	Over apch end Rwy 30.
Flagstaff (Pulliam)	113.85/FLG	A/8000	033	6.5	Over red and white square twr.
Fort Huachuca (Sierra Vista Muni/Libby AAF)	113.6/FHU	G	80		Runup area Twy G at 26 end.
Kingman (Kingman)	108.8/IGM	G	220	1.0	Center of runup area apch end Rwy 03.
Phoenix–Mesa Gateway	113.3/IWA	G	299	1.4	On Twy G between Rwy 12R and Rwy 12C.
Tucson (Tucson Intl)	116.0/TUS	G	318	0.7	On runup pad northeast of Twy A17.
Willie (Phoenix–Mesa Gateway)	113.3/IWA	G	124	0.6	On Twy P runup area Rwy 30C.
Winslow (Winslow–Lindbergh Rgnl)	112.6/INW	A/6000	106	5.0	Over apch end Rwy 29.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type, VOT Facility	Remarks
Phoenix Sky Harbor Intl.	109.0	G	
Prescott (Ernest A. Love Fld)	110.0	G	

CALIFORNIA

VOR RECEIVER CHECKPOINTS

Facility Name (Airport Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag.	Dist. from Fac. N.M.	Checkpoint Description
Arcata (Arcata)	110.2/ACV	G	148	0.7	On runup area apch end Rwy 32.
Chico (Chico Muni)	109.8/CIC	G	302	1.1	On north runup area.
Clovis (Fresno Yosemite Intl)	112.9/CZQ	A/1400	130	7.2	Over apch end Rwy 11L.
Compton Woodley	113.6/LAX	A/1000	091	10.0	Over apch end Rwy 25L.
Concord (Buchanan Field)	117.0/CCR	A/1200	172		Over apch end Rwy 19L.
Daggett (Barstow–Daggett)	113.2/DAG	A/2800	223	11.7	Over apch end Rwy 22.
El Nido (Merced Muni/Macready Fld)	114.2/HYP	A/1200	290		Over apch end Rwy 30.
Fortuna (Murray Fld)	114.0/FOT	A/1500	015	9.6	Over Rwy apch end 11.
Fortuna (Rohnerville)	114.0/FOT	A/1400	130	8.2	Over apch end Rwy 11.
Guadalupe (Santa Maria Pub/Capt G Allan Hancock Fld)	111.0/GLJ	A/1200	118		Over apch end Rwy 30.
Imperial (Imperial County)	115.9/IPL	A/1500	313	5.7	Over apch end Rwy 32.
Lake Hughes (General Wm J. Fox Airfield)	108.4/LHS	G	065	18.1	On the main ramp at east terminal gas pit.

Facility Name (Airport Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag.	Dist. from Fac. N.M.	Checkpoint Description
Maxwell (Willows–Glenn County)	110.0/MXW	A/1200	342	11.5	Over apch end Rwy 34.
Modesto (Modesto City–Co–Harry Sham Fld)	114.6/MOD	G	093	0.6	On ramp area next to intersection of Taxiways A and A1.
Oakland (Metropolitan Oakland Intl)	116.8/OAK	G	081	0.9	On runup pad end of Rwys 27R and 27L.
Palmdale (General Wm. J. Fox Airfield)	114.5/PMD	A/5000	296	10.1	Over center taxiway/runway intersection.
Paradise (Ontario Intl)	112.2/PDZ	G	320	8.9	Intersection of Twy Q, Twy P and Rwy 26L.
Paso Robles (Paso Robles Muni)	114.3/PRB	G	247	0.4	Transient parking ramp front of terminal.
Placerville (Placerville)	115.5/HNW	A/5200	076	8.7	Dam on west end of lake.
Pomona (Cable)	110.4/POM	A/3500	053	5.1	Over apch end of Rwy 06.
Red Bluff	115.7/RBL	A/1500	358	5.8	Over the center of Red Bluff Fairgrounds Race Track.
Redding (Redding Muni)	108.4/RDD	G	310	0.5	On runup area apch end Rwy 12.
Sacramento (McClellan Airfield)	109.2/MCC	G	358	.9	On Taxiway at end of Rwy 16.
	109.2/MCC	G	015	0.4	On Taxiway B.
Sacramento (Sacramento Executive)	115.2/SAC	A/1000	016	4.4	Over apch end Rwy 02.
Salinas (Salinas Muni)	117.3/SNS	G	247	0.4	Intersection of twys C and D.
San Francisco (San Francisco Intl)	115.8/SFO	A/1800	153	6.7	Over Crystal Springs causway 5 NM west of San Carlos arpt.
San Jose (Norman Y. Mineta San Jose Intl)	114.1/SJC	G	123	1.7	On Twy B and runup area Rwy 30L.
San Jose (Norman Y. Mineta San Jose Intl)	114.1/SJC	G	132	0.6	Twy V abeam Twy J.
Santa Barbara	114.9/RZS	A/2000	279	11	Over Lake Cachuma Dam spillway.
Santa Barbara (Santa Barbara Muni)	114.9/RZS	G	197	5.8	At intersection of Taxiway D and H.
Santa Rosa (Charles M. Schulz–Sonoma Co)	113.0/STS	A/2000	323	5.9	River bridge on Highway 101.
	113.0/STS	G	121		.5 NM runup Rwy 32.
	113.0/STS	G	344		.4 NM runup Rwy 14.
Scaggs Island (Napa County)	112.1/SGD	A/1000	047	5.4	Over rotating beacon.
Thermal (Jacqueline Cochran Rgnl)	116.2/TRM	G	329	0.3	On centerline of twy 375′ in front of hangar.
Van Nuys	113.1/VNY	G	169	0.5	At intersection of Twy D and Twy A.
	113.1/VNY	G	161	1.6	On West runup area rwy 34L.
	113.1/VNY	G	142	0.4	Runup area Rwy 16L.
Ventura (Camarillo)	108.2/VTU	G	330	6.1	Runup Rwy 26.
	108.2/VTU	G	320	6.5	Runup Rwy 08.
Ventura (Oxnard)	108.2/VTU	G	289	9.0	On parallel Twy W of Rwy 25 runup area.
Visalia (Visalia Muni)	109.4/VIS	A/1300	107	5.0	Over apch end rwy 12.
Woodside (Hayward Executive)	113.9/OSI	G	009		Runup area Rwy 28L.
Woodside (San Carlos)	113.9/OSI	A/2000	355	7.2	Over Rwy 30 numbers.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type, VOT Facility	Remarks
Bakersfield	111.2	G	
Hawthorne (Jack Northrop Fld/Hawthorne Muni)	113.9	G	Unusable on south taxiway.
Long Beach (Daugherty Field)	113.9	G	Unusable all areas except runup Rwy 25L at Taxiway J, runup Rwy 25R.
Los Angeles Intl	113.9	G	Unusable all areas except intersection of Twys A at G runup Rwy 25L at Twy F and intersection of Twy C at N.
Sacramento Executive	111.4	G	
Sacramento Intl	111.4	G	
San Diego (EL Cajon) (Gillespie Fld)	110.0	G	
San Diego (Mount Solead) (San Diego Intl)	109.0	G	Unusable all areas except runup area Rwy 27.
San Diego (Montgomery)	109.0	G	Unusable all areas except runup areas for Rwys 05 and 28L.
San Francisco Intl	111.0	G	
Santa Ana (John Wayne Airport/Orange Co)	110.0	G	
Santa Monica Muni	113.9	G	Unusable all areas except runup areas for Rwys 03 and 21.
Torrance (Zamperini Fld)	113.9	G	

COLORADO

VOR RECEIVER CHECKPOINTS

Facility Name (Airport Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag.	Dist. from Fac. N.M.	Checkpoint Description
Akron	114.4/AKO	A/6000	179	7.0	Over lgtd twr.
Cortez (Cortez Muni)	108.4/CEZ	A/7000	196		Over apch end rwy 21.
Denver (Rocky Mountain Metropolitan)	115.4/BJC	G	060	0.6	Runup area at Alpha 17.
Hayden (Craig–Moffat)	115.6/CHE	A/7200	248	9.6	Over apch end rwy 25.
Pueblo (Pueblo Memorial)	116.7/PUB	G	249	3.8	On painted circle with arrow on runup pad S side apch end rwy 08L.
	116.7/PUB	A/7300	294	7.8	Over KOAA TV twr, 5.4 NM of arpt.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type, VOT Facility	Remarks
Centennial	108.2	G	VOT unusable east of Twy C–4.
(City of Colorado Springs Muni)	110.4	G	
Denver International	110.0	G	VOT unusable in terminal area N of Twy AA to Twy BN and W Twy L to Twy F.

NEVADA

VOR RECEIVER CHECKPOINTS

Facility Name (Airport Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag.	Dist. from Fac. N.M.	Checkpoint Description
Bullion (Elko Rgnl)	114.5/BQU	A/7000	343	5.1	Over center of race track.
Ely (Ely Arpt/Yelland Fld)	110.6/ELY	G	059		Intersection of Twy A and Twy B.
Mustang (Reno/Stead)	117.9/FMG	A/7000	291	12.8	Over atct.
Wells (Wells Muni/Harriet Fld)	114.2/LWL	A/7000	286	8.3	Over radio twr.
Winnemucca Muni	108.2/INA	A/6000	024	6.5	Over highway bridge crossing railroad tracks.
	108.2/INA	G	134	.8	Runup area Rwy 32.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type, VOT Facility	Remarks
Las Vegas (North Las Vegas)	108.2	G	

NEW MEXICO

VOR RECEIVER CHECKPOINTS

Facility Name (Airport Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag.	Dist. from Fac. N.M.	Checkpoint Description
Carlsbad (Carlsbad City Air Terminal)	116.3/CNM	G	333	5.4	On Twy A in front of fire department.
Hobbs (Lea County Rgnl)	111.0/HOB	G	030	3.5	On runup pad apch end Rwy 03.
Las Vegas (Las Vegas Muni)	117.3/LVS	A/8500	233	6.0	Over yellow water tank.
Roswell (Roswell Intl Air Center)	116.1/CME	G	100	5.2	On middle of W ramp adjacent to twy.
Santa Fe (Santa Fe County Muni)	110.6/SAF	G	334	4.7	At junction main intersection of twy and ramp. (Checkpoint unusable).
Silver City (Grant Co)	110.8/SVC	G	100	0.9	Twy entrance to Rwy 26 just west of approach end.
Texico (Clovis Muni)	112.2/TXO	A/6000	240	12.7	Over rotating beacon on steel twr adjacent to terminal bldg.
Truth or Consequences (Truth or Consequences Muni)	112.7/TCS	G	155	3.2	On Twy A 2000′ from AER 31.
Tucumcari (Tucumcari Muni)	113.6/TCC	G	258	0.5	100′ in front of terminal on twy.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type, VOT Facility	Remarks
Albuquerque Intl. Sunport	111.0	G	

UTAH

VOR RECEIVER CHECKPOINTS

Facility Name (Airport Name)	Freq/Ident	Type Check Pt. Gnd. AB/ALT	Azimuth from Fac. Mag.	Dist. from Fac. N.M.	Checkpoint Description
Cedar City (Cedar City Rgnl)	117.3/CDC	A/6500	177	4.7	Over apch end Rwy 20.
Delta (Delta Muni)	116.1/DTA	A/6000	346	5.3	Over apch end of Rwy 17.
Vernal (Vernal Rgnl)	108.2/VEL	A/8000	021	6.5	Over towers on knoll.

VOR TEST FACILITIES (VOT)

Facility Name (Airport Name)	Freq.	Type, VOT Facility	Remarks
Salt Lake City Intl	111.0	G	

PARACHUTE JUMPING AREAS

The following tabulation lists all reported parachute jumping sites in the area of coverage of this directory. Unless otherwise indicated, all activities are conducted during daylight hours and under VFR conditions. The busiest periods of activity are normally on weekends and holidays, but jumps can be expected at anytime during the week at the locations listed. Jumps within restricted airspace are not listed.

All times are local and altitudes MSL unless otherwise specified.

Contact facility and frequency is listed at the end of the remarks, when available, in bold face type.

Refer to Federal Aviation Regulations Part 105 for required procedures relating to parachute jumping.

Organizations desiring listing of their jumping activities in this publication should contact the nearest FSS, tower or ARTCC.

Qualified parachute jumping sites will be depicted on the appropriate visual chart(s).

Note: (c) in this publication indicates that the parachute jump area is charted.

To qualify for charting, a jump area must meet the following criteria:

(1) Been in operation for at least 1 year.

(2) Operate year round (at least on weekends).

(3) Log 4,000 or more jumps each year.

In addition, jump sites can be nominated by FAA Regions if special circumstances require charting.

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
	ARIZONA		
(c) **Buckeye Muni**	8 NM; 089° Buckeye	14,000	Daily SR–2 hours after SS. 2 NM radius.
(c) **Bullhead City, Eagle Airpark..**	10 NM; 300° Needles	15,000	3 NM Daily 0645–1835
(c) **Casa Grande Muni**	9 NM; 041° Stanfield	12,000	2 NM Daily 0600–1700.
(c) **Coolidge Muni**	25 NM; 070° Stanfield	17,999	15 NM radius, daily. High altitude, full canopy, free fall, and low level combat parachute jumping. Large military transports in vicinity of arpt.
(c) **Cottonwood Arpt**	22.1 NM; 072° Drake	14,000	Continuous during dalgt hrs. **Albuquerque Center 124.5**
(c) **Eloy Muni**	17 NM; 094° Stanfield	17,500	4 NM radius. Daily SR–2 hours after SS (ctc UNICOM for PAJA advisories. Landing area ¼ mile E of rwy centerline).
(c) **Estrella Sailport**	17 NM; 300° Stanfield	14,000	1 NM radius. Daily SR–SS.
Kingman Arpt	25 NM; 334° Kingman	12,000	5 NM radius, daily SR–SS.
(c) **Laguna AAF/Yuma Proving Ground**	11.8 NM; 048° Bard	25,000	Continuous 24 hrs. 5 NM radius, Laguna AAF Control Zone.
(c) **Marana Rgnl**	25 NM; 308° Tucson	17,999	15 NM radius, Continuous. **Tucson Tower 125.1**
(c) **Marana, Pinal Airpark**	33 NM; 308° Tucson	25,000	15 NM radius, Continuous.
	CALIFORNIA		
Apple Valley Arpt	10 NM; 073° Victorville	15,000	2 NM radius, daily SR–SS.
(c) **Brickland's Ranch**	12.5 NM; 339° Redding	3,900	3 NM radius, May 1 thru Nov 1 yearly.
(c) **Byron Arpt**	23 NM; 250° Manteca	15,000	Daily SR–SS
(c) **California City Muni Arpt**	30 NM; 348° Palmdale	17,500	Daily SR–SS.
(c) **Camarillo Arpt**	8.4 NM; 000° Ventura	14,000	2 NM radius, usually blo 10,000′, SR–SS; Listen for 1–minute call on Camarillo Twr freq.
(c) **Cloverdale Muni Arpt**	18 NM; 316° Santa Rosa	12,500	1 NM radius, Mon–Sun 0800–2100.
(c) **Davis/Woodland/Winters, Yolo Co**	16.5 NM; 283° Sacramento	13,500	3 NM radius, daily SR–2300.
(c) **Fall River Mills Arpt**	34.4 NM; 63° Redding	8,700	2 NM radius, daily May 1–Nov 30.
(c) **Hemet/Diamond Valley**	12.5 NM; 107° Homeland	14,000	3 NM radius. Wed–Fri 0900–SS. Sat–Sun 0800–SS, other days and times by request.
(c) **Hollister Muni**	16.6 NM; 017° Salinas	17,999	1 NM. Daily, all hours. **Oakland Center 128.7**
(c) **Lake Elsinore, Skylark Fld**	10.5 NM; 198° Homeland	14,000	1 NM radius, 0800–SS daily
(c) **Lincoln Rgnl/Karl Harder Fld.**	14.7 NM; 353° McClellan	15,000	Daily 0800–SR
(c) **Lodi Arpt**	15 NM; 285° Linden	15,000	Continuous 24 hrs. 1 NM radius. Other altitudes by notam.
Lompoc Arpt	20 NM; 277° Gaviota	15,000	4 NM radius, Thu–Mon SR–SS.
(c) **Lompoc**	14 NM; 284° Gaviota	17,999	1 NM radius, daily 1600–0400.

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
(c) **Los Alamitos AAF**	At field	1,500 AGL	Weekends and occasional weekdays
(c) **Madera Muni Arpt**	15.2 NM; 277° Clovis	15,000	3 NM radius. Daily SR–1 hour after SS.
(c) **Marina Muni**	7.6 NM; 259° Salinas	12,500	SR–SS Sat and Sun
Murrieta, Bear Creek Arpt	13 NM; 178° Homeland	11,500	1 NM radius. Mon–Fri 0800–sunset, Sat–Sun 0630–sunset.
(c) **Oro Loma, Eagle Fld**	12 NM; 010° Panoche	12,500	2 NM radius, Fri–Sun.
Palm Springs	12 NM; 130° Palm Springs	14,000	1 NM radius. Daily sunrise to sunset.
(c) **Paradise Skypark Arpt**	12 NM; 097° Chico	14,500	Daily, 0800–SS.
(c) **Perris Valley Arpt**	1 NM; 220° Homeland	14,500	Daily SR–SS
(c) **Salinas, Davis Road Drop Zone**	6 NM; 235° Salinas	18,000	1 NM radius, Daily 0500–1900
(c) **San Diego, Brown Fld Muni**	2.3 NM 157° Poggi	14,000	2 NM radius. Mon–Fri 0800–1800.
(c) **San Diego, Leon Drop Zone**	11.5 NM; 192° Mission Bay	2,800	Continuous. 1NM radius. Altitudes above 2800–15000 MSL avbl upon request, (ctc SOCAL prior to entering Terminal Control Area).
(c) **San Diego, Otay Reservoir**	4.4 NM; 058° Poggi	5,800	1NM radius. Daily SR–SS.
(c) **San Diego, South Bay**	7 NM; 136° Mission Bay	2,800	Daily SR–SS. 1NM radius altitudes above 2800–3300 MSL avbl upon request, (ctc SOCAL prior to entering Terminal Control Area).
(c) **San Diego, Trident**	5 NM; 111° Poggi	15,000	Daily SR–SS. 1NM radius
Santa Maria	5 NM; 021° Guadalupe	12,500 AGL	0900–SS, Sat, Sun and holidays
(c) **Santa Ynez**	8 NM; 293° Gaviota	17,999	1 NM radius, daily 1600–0400.
(c) **Slate Creek**	30 NM; 323° Redding	5,500	3 NM radius. May 1 thru Nov 1 yearly.
(c) **Taft Drop Zone**	25.7 NM; 197° Shafter	13,000	1 NM radius. SR–SS, occasional night jumps by NOTAM.
(c) **Taft–Kern Co Arpt**	21 NM; 066° Fellows	13,000	2 NM radius. Daily SR–SS, occasional ngt jumps by NOTAM.
(c) **Tres Pinos Drop Zone**	16 NM; 045° Salinas	12,500	1 NM radius. Daily SR–SS.
(c) **Twentynine Palms**	12 NM; 265° Twentynine Palms	12,500	1 NM radius, 0900–SS, Sat, Sun, and holidays.
(c) **Wilton Drop Zone**	17.5 NM; 080° Sacramento	1,500 AGL	Hvy equip, paratroopers.
	COLORADO		
Boulder Muni	9 NM; 328° Jeffco	18,000	2 NM radius. Daylight hrs.
(c) **Brush Muni**	19.6 NM 277° Akron	17,700	2 NM radius, Daily 0800–SS.
(c) **Calhan Arpt**	17NM; 057° Black Forrest	17,500	2 NM radius, 1hr before SR– 1 hr after SS daily.
(c) **Canon City, Fremont County Arpt**	32.9 NM; 271° Pueblo	17,500	2 NM radius. Weekends 0600–2100.
(c) **Colorado Springs, USAF Academy Airstrip**	9 NM; 266° Black Forrest	17,500	Daily SR–SS occasionally til 2200.
(c) **Fort Collins/Loveland Muni Arpt**	19.5 NM; 248° Gill	17,500	3 NM Wed–Sun SR–1 hr after SS.
Greeley, Skydive the Farm	16 NM; 308° Gill	14,500	2 NM radius. Fri–Sun 0800–SS.
(c) **Hugo, Kelly Drop Zone**	10 NM; 254° Hugo	8,000	2 NM radius. Heavy equipment paratroopers possible jumps during IFR/marginal VFR.
(c) **Longmont, Vance Brand Arpt**	15 NM; 346° Jeffco	17,900	2 NM radius. Daily SR–2 hrs after SS.
(c) **Trinidad, Pinon Drop Zone**	28 NM; 279° Tobe	8,000	2 NM radius. Heavy equipment paratroopers possible jumps during IFR/marginal VFR.

LOCATION	DISTANCE AND RADIAL FROM NEAREST VOR/VORTAC	MAXIMUM ALTITUDE	REMARKS
	NEVADA		
(c) **Boulder City Arpt.**	3 NM; 164° Boulder City	17,000	0.5 NM radius. Daily SR–SS.
(c) **El Dorado Jump Zone**	7 NM; 195° Boulder City	17,000	0.5 NM radius. Daily, SR–SS.
Indian Springs AF Aux Arpt	38 NM; 304° Las Vegas	10,000	5 NM radius. Daily SR–SS.
(c) **Jean Drop Zone**	24.1 NM; 191° Las Vegas	15,000	1 NM radius. Daily SR–SS.
(c) **Mesquite Arpt**	11.4 NM; 054° Mormon Mesa	17,500	2 NM radius. Continuous SR–SS.
(c) **Nellis AFB, Gunfighter Drop Zone**	12.7 NM; 25° Las Vegas	17,500 AGL	1.3 NM east of rwys. SR–SS Sat–Sun. Other times by NOTAM.
(c) **Pahrump**	49 NM; 126° Beatty	12,500	Tue–Sun SR–SS
Reno/Stead Arpt	15 NM; 292° Mustang	14,000	1.0 NM radius. Daily SR–SS.
(c) **Tonopah Arpt**	10 NM; 270° Tonopah	10,000	1 NM radius. Daily SR–SS.
	NEW MEXICO		
Albuquerque	6 NM; 050° Albuquerque	18,000	Weekends and holidays
	17 NM; 140° Albuquerque	17,000	SR–SS weekends.
(c) **Belen, Alexander Muni**	12 NM; 346° Socorro	16,000	1 NM radius. Daily SR–SS.
(c) **Santa Teresa, Dona Ana Co at Santa Teresa Arpt**	22 NM; 268° El Paso	13,000	1 NM radius. SR–SS Sat–Sun. S side of arpt.
	UTAH		
(c) **Cedar Fort, Cedar Valley Arpt**	6.5 NM; 313° Fairfield	17,500	3 NM radius. Daily SR–2300.
Goshen Wells, Cedar Valley	4 NM; 270° Fairfield	10,000	0.25 NM radius. Occasional use
(c) **Hurricane, General Dick Stout Fld**	15 NM; 060° St George	15,000	1 NM radius. Daily SR–SS.
Logan, Logan–Cache Arpt	7.2 NM; 051° Brigham City	15,000	0.5 NM radius 0900–sunset. Weekends and Holidays.
(c) **Ogden–Hinckley**	5 NM; 085° Ogden	17,999	2 NM radius. Daily SR–SS. NE corner Ogden Arpt.
(c) **Bolinder Fld–Tooele Valley Arpt**	24 NM; 215° Wasatch	17,000	2 NM radius. Daily 1300–0600.

The purpose of this bulletin is to provide major changes in aeronautical information that have occurred since the last publication date of each Sectional Aeronautical, VFR Terminal Area, and Helicopter Route Charts listed. The general policy is to include only those changes to controlled airspace and special use airspace that present a hazardous condition or impose a restriction on the pilot, and major changes to airports and radio navigational facilities, thereby providing the VFR pilot with the essential data necessary to update and maintain chart currency. The data is grouped by type and then by effective date. When a new edition of the Aeronautical Chart is published, the corrective tabulation will be removed from this bulletin. Inasmuch as this Bulletin provides major changes only, pilots should consult the airport listing in this directory for all new information. Users of U.S. World Aeronautical Charts (WAC) and U.S. Gulf Coast VFR Aeronautical Charts should consult the appropriate Sectional and VFR Terminal Area Charts for revisions.

Military Training Routes (MTRs) are shown on Sectional Aeronautical Charts, VFR Terminal Area, and Helicopter Route Charts. Only the route centerline, direction of flight and the route designator are shown — route widths and altitudes are not shown. Since these routes are subject to change every 56 days and the charts are reissued generally every 6 months, routes with a change in the alignment of the charted route centerline will be listed in this Aeronautical Chart Bulletin below. You are advised to contact the nearest FSS for route dimensions and current status for those routes affecting your flight.

ALBUQUERQUE SECTIONAL
84th Edition, 22 Oct 2009

OBSTRUCTIONS
22 Oct 2009 – 8 Apr 2010 No Major Changes.

AIRPORTS
22 Oct 2009 – 8 Apr 2010 No Major Changes.

NAVAIDs
22 Oct 2009 – 8 Apr 2010 No Major Changes.

AIRSPACE
22 Oct 2009 – 8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
22 Oct 2009 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
22 Oct 2009 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
22 Oct 2009 – 8 Apr 2010 No Major Changes.

CG–19 WORLD AERONAUTICAL CHART
39th Edition, 4 Jun 2009

OBSTRUCTIONS
2 Jul 2009 – 8 Apr 2010 No Major Changes.

AIRPORTS
2 Jul 2009 Add arpt elev 1071, lighting code *L, runway length 71 and unicom at GLENDALE arpt, 33°31′36″N, 112°17′42″W.
27 Aug 2009 – 8 Apr 2010 No Major Changes.

NAVAIDs
2 Jul 2009 – 8 Apr 2010 No Major Changes.

AIRSPACE
2 Jul 2009 – 8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
2 Jul 2009 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
2 Jul 2009 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
2 Jul 2009 – 8 Apr 2010 No Major Changes.

CHEYENNE SECTIONAL
81st Edition, 14 Jan 2010

OBSTRUCTIONS
11 Feb 2010 Add obst 4844′MSL (350′AGL)UC, 40°21′23″N, 104°08′48″W.
Add obst 6184′MSL (390′AGL)UC, 43°02′26″N, 105°58′50″W.
8 Apr 2010 Add obst 5024′MSL (367′AGL)UC, 44°11′51″N, 106°16′13″W.
Add windmill farm. 7643′ UC is highest MSL, 41°39′33″N, 106°03′26″W.
Add windmill farm. 6269′ UC is highest MSL, 43°01′45″N, 106°00′03″W.
Add obst 4749′MSL (500′AGL)UC, 44°23′17″N, 105°27′34″W.
Add obst 2485′MSL (306′AGL)UC, 44°02′17″N, 101°41′15″W.
Add obst 7189′MSL (270′AGL)UC, 41°40′47″N, 107°03′49″W.
Add obst 5832′MSL (300′AGL)UC, 43°18′20″N, 107°41′37″W.
Add obst 8603′MSL (270′AGL)UC, 41°31′41″N, 107°22′18″W.
Add obst 5591′MSL (389′AGL)UC, 42°53′04″N, 106°13′59″W.
Add obst 7062′MSL (407′AGL)UC, 41°08′21″N, 105°01′30″W.
Add obst 4489′MSL (350′AGL)UC, 41°31′40″N, 103°13′48″W.

AIRPORTS
11 Feb 2010 No Major Changes.
8 Apr 2010 Change CTAF 122.9 to 122.8 at SOUTH BIG HORN CO arpt, 44°31′01″N, 108°04′58″W.

NAVAIDS
11 Feb 2010 – 8 Apr 2010 No Major Changes.

AIRSPACE
11 Feb 2010 Revise RIVERTON, WY Class E: That airspace extending upward from 700 feet above the surface within an 8.7-mile radius of the Riverton Regional Airport and within 4 miles each side of the Riverton VOR/DME 291° radial extending from the 8.7-mile radius to 16.6 miles west of the VOR/ DME, and within 3.1 miles each side of the Riverton VOR/DME 123° radial extending from the 8.7-mile radius to 10.5 miles southeast of the VOR/DME; that airspace extending upward from 1200 feet above the surface within a 21.8-mile radius of the Riverton VOR/DME within 8.7 miles east and 6.1 miles west of the Riverton VOR/DME 016° radial extending from the 21.8-mile radius to 33.1 miles north of the VOR/DME, and within 6.1 miles northeast and 12.7 miles southwest of the Riverton VOR/DME 301° radial extending from the 21.8-mile radius to 32.2 miles northwest of the VOR/DME, on the east within an area bounded by a point beginning at 42°56′30″N, 107°59′45″W; to 42°54′53″N, 107°44′31″ W; to 42°42′35″N, 107°53′00″W; to 42°49′00″N, 108°06′00″W; thence to the point of beginning.
8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
11 Feb 2010 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
11 Feb 2010 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
11 Feb 2010 – 8 Apr 2010 No Major Changes.

DENVER SECTIONAL
82nd Edition, 14 Jan 2010

OBSTRUCTIONS
11 Feb 2010 Add obst 6957′MSL (260′AGL)UC, 35°44′25″N, 109°26′49″W.
Add obst 5570′MSL (350′AGL)UC, 39°53′07″N, 104°28′50″W.
Add obst 5430′MSL (350′AGL)UC, 39°50′33″N, 103°53′05″W.
Add obst 5441′MSL (350′AGL)UC, 39°54′44″N, 104°14′34″W.
8 Apr 2010 No Major Changes.

AIRPORTS
11 Feb 2010 – 8 Apr 2010 No Major Changes.

NAVAIDS
11 Feb 2010 – 8 Apr 2010 No Major Changes.

AIRSPACE
11 Feb 2010 No Major Changes.
8 Apr 2010 Revise GRAND JUNCTION, CO Class E5. That airspace extending upward from 700 feet above the surface within 7 miles northwest and 4.3 miles southeast of the Grand Junction VORTAC 247° and 067° radials extending from 11.4 miles southwest to 12.3 miles northeast of the VORTAC, and within 1.8 miles south and 9.2 miles north of the Grand Junction VORTAC 110° radial extending from the VORTAC to 19.2 miles southeast of the VORTAC; that airspace extending upward from 1,200 feet above the surface within a 30.5-miles radius of the Grand Junction VORTAC, within 6.5 miles each side of the Grand Junction VORTAC 099° radial extending from the 30.5-mile radius to 58 miles east of the VORTAC, and within 4.3 miles each side of the Grand Junction VORTAC 166° radial extending from the 30.5-mile radius to 33.1 miles south of the VORTAC, and within 4.3 miles northeast and 4.9 miles southwest of the Grand Junction ILS localizer northwest course extending from the 30.5-mile radius to the intersection of the localizer northwest course and the Grand Junction VORTAC 318° radial.

SPECIAL USE AIRSPACE
11 Feb 2010 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
11 Feb 2010 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
11 Feb 2010 – 8 Apr 2010 No Major Changes.

DENVER/COLORADO SPRINGS TERMINAL AREA CHART
73rd Edition, 14 Jan 2010

OBSTRUCTIONS
11 Feb 2010 Add obst 4492′MSL (350′AGL)UC, 38°07′04″N, 103°31′00″W.
Add obst 4844′MSL (350′AGL)UC, 40°21′23″N, 104°08′48″W.
Add obst 5570′MSL (350′AGL)UC, 39°53′07″N, 104°28′50″W.
Add obst 5430′MSL (350′AGL)UC, 39°50′33″N, 103°53′05″W.
Add obst 5441′MSL (350′AGL)UC, 39°54′44″N, 104°14′34″W.
8 Apr 2010 No Major Changes.

AIRPORTS
11 Feb 2010 – 8 Apr 2010 No Major Changes.

NAVAIDS
11 Feb 2010 – 8 Apr 2010 No Major Changes.

AIRSPACE
11 Feb 2010 – 8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
11 Feb 2010 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
11 Feb 2010 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
11 Feb 2010 – 8 Apr 2010 No Major Changes.

EL PASO SECTIONAL
84th Edition, 11 Feb 2010

OBSTRUCTIONS
11 Feb 2010 – 8 Apr 2010 No Major Changes.

AIRPORTS
11 Feb 2010 – 8 Apr 2010 No Major Changes.

NAVAIDs
11 Feb 2010 – 8 Apr 2010 No Major Changes.

AIRSPACE
11 Feb 2010 – 8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
11 Feb 2010 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
11 Feb 2010 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
11 Feb 2010 – 8 Apr 2010 No Major Changes.

GRAND CANYON VFR AERONAUTICAL CHART
3rd Edition, 19 Apr 2001

OBSTRUCTIONS
17 May 2001 – 8 Apr 2010 No Major Changes.

AIRPORTS
17 May 2001 – 10 May 2007 No Major Changes.
5 Jul 2007 Delete TASSI arpt, 36°15′09″N, 113°57′54″W.
Delete THE RANCH arpt, 36°00′37″N, 112°17′30″W.
30 Aug 2007 – 8 Apr 2010 No Major Changes.

NAVAIDs
17 May 2001 – 8 Apr 2010 No Major Changes.

AIRSPACE
17 May 2001 – 8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
17 May 2001 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
17 May 2001 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
17 May 2001 Blue Direct North (BDN) west bound route, add 10,500 with a westbound arrow above the 8,500 figure just west of Supal/Diamond Creek Sector boundary.
12 Jul 2001 – 8 Apr 2010 No Major Changes.

KLAMATH FALLS SECTIONAL
82nd Edition, 8 Apr 2010

OBSTRUCTIONS
8 Apr 2010 No Major Changes.

AIRPORTS
8 Apr 2010 No Major Changes.

NAVAIDs
8 Apr 2010 No Major Changes.

AIRSPACE
8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
8 Apr 2010 No Major Changes.

MISCELLANEOUS
8 Apr 2010 No Major Changes.

LAS VEGAS SECTIONAL
83rd Edition, 11 Mar 2010

OBSTRUCTIONS
8 Apr 2010 No Major Changes.

AIRPORTS
8 Apr 2010 Change CTAF 122.8 to 123.05 at STOUT arpt, 37°08′20″N, 113°18′23″W.

NAVAIDs
8 Apr 2010 No Major Changes.

AIRSPACE
8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
8 Apr 2010 No Major Changes.

MISCELLANEOUS
8 Apr 2010 No Major Changes.

LAS VEGAS TERMINAL AREA CHART
72nd Edition, 11 Mar 2010

OBSTRUCTIONS
8 Apr 2010 No Major Changes.

AIRPORTS
8 Apr 2010 No Major Changes.

NAVAIDs
8 Apr 2010 No Major Changes.

AIRSPACE
8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
8 Apr 2010 No Major Changes.

MISCELLANEOUS
8 Apr 2010 No Major Changes.

LOS ANGELES HELICOPTER ROUTE CHART
8th Edition, 22 Dec 2005

OBSTRUCTIONS
22 Dec 2005 – 13 Apr 2006 No Major Changes.
8 Jun 2006 Add group obst 405′MSL(390′AGL)UC, 33°43′39″N, 118°14′19″W.
3 Aug 2006 – 15 Jan 2009 No Major Changes.
12 Mar 2009 Add obst 421′MSL (348′AGL), 33°53′39″N, 118°13′31″W.
7 May 2009 – 8 Apr 2010 No Major Changes.

AIRPORTS
22 Dec 2005 – 3 Aug 2006 No Major Changes.
28 Sep 2006 Delete METHODIST heliport, 34°08′00″N, 118°02′33″W.
Delete SAN PEDRO PENINSULA heliport, 33°44′19″N, 118°18′38″W.
23 Nov 2006 – 30 Aug 2007 No Major Changes.
25 Oct 2007 Delete ANAHEIM POLICE heliport, 33°49′35″N, 117°54′05″W.
20 Dec 2007 – 20 Nov 2008 No Major Changes.
15 Jan 2009 Add SAN BERNARDINO INTL ATCT 119.45, 34°05′43″N, 117°14′06″W.
EL TORO MCAS arpt abandoned, 33°40′34″N, 117°43′52″W.
Change CTAF freq 122.975 to 119.45 at SAN BERNARDINO INTL arpt, 34°05′43″N, 117°14′06″W.
12 Mar 2009 – 17 Dec 2009 No Major Changes.
11 Feb 2010 Delete LAKE MATHEWS arpt, 33°51′11″N, 117°25′26″W.
8 Apr 2010 No Major Changes.

NAVAIDs
22 Dec 2005 – 15 Jan 2009 No Major Changes.
12 Mar 2009 Change RIVERSIDE VOR position from 33°57′07″N, 117°26′57″W to 33°57′19″N, 117°26′59″W, and magnetic variation from 15E to 14E.
7 May 2009 – 8 Apr 2010 No Major Changes.

AIRSPACE
22 Dec 2005 – 25 Sep 2008 No Major Changes.
20 Nov 2008 Add SAN BERNARDINO, CA Class D: That airspace extending upward from the surface to and including 3200 feet MSL beginning at 34°08′09″N, 117°18′40″W; to 34°08′09″N, 117°11′13″W; to 34°07′42″N, 117°10′26″W; to 34°02′24″N, 117°10′26″W; thence via the 4.5 nautical mile radius of the San Bernardino Airport clockwise to the point of beginning. This Class D airspace area is effective during the specific dates and times established in advance by a Notice to Airmen. The effective dates and times will thereafter be continuously published in the Airport/Facility Directory.
15 Jan 2009 – 2 Jul 2009 No Major Changes.
27 Aug 2009 Change SANTA ANA Class C freq from 380.2 to 279.575
22 Oct 2009 No Major Changes.
17 Dec 2009 Change ONTARIO INTL ATCT freq. from 385.6 to 360.775, 34°03′22″N, 117°36′04″W.
11 Feb 2010 – 8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
22 Dec 2005 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
22 Dec 2005 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
22 Dec 2005 – 8 Jun 2006 No Major Changes.
3 Aug 2006 Change MEF 0^5 to 0^6 in quadrant 33°30′–33°45′N, 118°00′–118°15′W.
28 Sep 2006 – 8 Apr 2010 No Major Changes.

LOS ANGELES SECTIONAL
86th Edition, 17 DEC 2009

OBSTRUCTIONS
17 Dec 2009 – 8 Apr 2010 No Major Changes.

AIRPORTS
17 Dec 2009 – 8 Apr 2010 No Major Changes.

NAVAIDs
17 Dec 2009 – 8 Apr 2010 No Major Changes.

AIRSPACE
17 Dec 2009 No Major Changes.
11 Feb 2010 Change CAMP PENDLETON MCAS (MUNN) ATCT freq. from 382.2 to 340.2, 33°18′04″N, 117°21′18″W.
8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
17 Dec 2009 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
17 Dec 2009 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
17 Dec 2009 – 8 Apr 2010 No Major Changes.

LOS ANGELES TERMINAL AREA CHART
60th Edition, 17 Dec 2009

OBSTRUCTIONS
17 Dec 2009 – 8 Apr 2010 No Major Changes.

AIRPORTS
17 Dec 2009 No Major Changes.
11 Feb 2010 Delete LAKE MATHEWS arpt, 33°51′11″N, 117°25′26″W.
8 Apr 2010 No Major Changes.

NAVAIDs
17 Dec 2009 – 8 Apr 2010 No Major Changes.

AIRSPACE
17 Dec 2009 – 8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
17 Dec 2009 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
17 Dec 2009 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
17 Dec 2009 – 8 Apr 2010 No Major Changes.

PHOENIX SECTIONAL
82nd Edition, 22 Oct 2009

OBSTRUCTIONS
22 Oct 2009 No Major Changes.
17 Dec 2009 Add obst 6479′MSL (417′AGL)UC, 34°38′19″N, 110°18′56″W.
11 Feb 2010 No Major Changes.
8 Apr 2010 Add obst 1774′MSL (255′AGL), 33°43′29″N, 113°42′12″W.
Add obst 1391′MSL (260′AGL)UC, 33°50′19″N, 113°53′10″W.
Add windmill farm. 6479′ is highest MSL, (417′AGL), 34°38′19″N, 110°18′56″W.

AIRPORTS
22 Oct 2009 – 17 Dec 2009 No Major Changes.
11 Feb 2010 Delete RYAN FIELD ATCT 120.35, 32°08′32″N, 111°10′28″W.
8 Apr 2010 Change FALCON FIELD ATCT freq from 124.6 to 119.7 (Arr N,W; Dep Rwy 04L/22R), 124.6 (Arr S,E; Dep Rwy 04R/22L), 33°27′39″N, 111°43′42″W.

NAVAIDs
22 Oct 2009 – 8 Apr 2010 No Major Changes.

AIRSPACE
22 Oct 2009 No Major Changes.
17 Dec 2009 Revise LAKE HAVASU, AZ. Class E: That airspace extending upward from 700 feet above the surface within a 6.7-mile radius of Lake Havasu City Airport and within 1 mile each side of the Lake Havasu City Airport 150° bearing extending from the 6.7-mile radius to 13 miles southeast of the Lake Havasu City Airport, excluding that airspace with a 2.3-mile radius of Chemehuevi Valley Airport. That airspace extending upward from 1,200 feet above the surface bounded by a line beginning at 34°42′47″N, 114°29′37″W; to 34°42′47″N, 114°12′06″W; to 34°23′00″N,114°12′06″W; to 34°17′19″N, 114°32′12″W; thence to the point of beginning.
11 Feb 2010 – 8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
22 Oct 2009 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
22 Oct 2009 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
22 Oct 2009 – 8 Apr 2010 No Major Changes.

PHOENIX TERMINAL AREA CHART
41st Edition, 22 Oct 2009

OBSTRUCTIONS
22 Oct 2009 – 8 Apr 2010 No Major Changes.

AIRPORTS
22 Oct 2009 – 11 Feb 2010 No Major Changes.
8 Apr 2010 Change FALCON FIELD ATCT freq from 124.6 to 119.7 (Arr N,W; Dep Rwy 04L/22R), 124.6 (Arr S,E; Dep Rwy 04R/22L), 33°27′39″N, 111°43′42″W.

NAVAIDs
22 Oct 2009 – 8 Apr 2010 No Major Changes.

AIRSPACE
22 Oct 2009 – 8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
22 Oct 2009 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
22 Oct 2009 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
22 Oct 2009 – 8 Apr 2010 No Major Changes.

SALT LAKE CITY HELICOPTER ROUTE CHART
3rd Edition, 26 Oct 2006

OBSTRUCTIONS
23 Nov 2006 – 8 Apr 2010 No Major Changes.

AIRPORTS
23 Nov 2006 – 10 Apr 2008 No Major Changes.
5 Jun 2008 Delete PAYNE arpt, 41°05′54″N, 112°06′56″W.
Delete WARD heli, 40°35′59″N, 111°48′03″W.
31 Jul 2008 – 25 Sep 2008 No Major Changes.
20 Nov 2008 Delete CHANNEL 4 heli, 40°43′57″N, 111°57′20″W.
15 Jan 2009 – 8 Apr 2010 No Major Changes.

NAVAIDs
23 Nov 2006 – 8 Apr 2010 No Major Changes.

AIRSPACE
23 Nov 2006 – 8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
23 Nov 2006 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
23 Nov 2006 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
23 Nov 2006 – 8 Apr 2010 No Major Changes.

SALT LAKE CITY SECTIONAL
83rd Edition, 8 Apr 2010

OBSTRUCTIONS
8 Apr 2010 No Major Changes.

AIRPORTS
8 Apr 2010 No Major Changes.

NAVAIDs
8 Apr 2010 No Major Changes.

AIRSPACE
8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
8 Apr 2010 No Major Changes.

MISCELLANEOUS
8 Apr 2010 No Major Changes.

SALT LAKE CITY TERMINAL AREA CHART
42nd Edition, 8 Apr 2010

OBSTRUCTIONS
8 Apr 2010 No Major Changes.

AIRPORTS
8 Apr 2010 No Major Changes.

NAVAIDs
8 Apr 2010 No Major Changes.

AIRSPACE
8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
8 Apr 2010 No Major Changes.

MISCELLANEOUS
8 Apr 2010 No Major Changes.

SAN DIEGO TERMINAL AREA CHART
59th Edition, 17 Dec 2009

OBSTRUCTIONS
17 Dec 2009 – 8 Apr 2010 No Major Changes.

AIRPORTS
17 Dec 2009 – 8 Apr 2010 No Major Changes.

NAVAIDs
17 Dec 2009 – 8 Apr 2010 No Major Changes.

AIRSPACE
17 Dec 2009 No Major Changes.
11 Feb 2010 Change CAMP PENDLETON MCAS (MUNN) ATCT freq. from 382.2 to 340.2, 33°18′04″N, 117°21′18″W.
8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
17 Dec 2009 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
17 Dec 2009 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
17 Dec 2009 – 8 Apr 2010 No Major Changes.

SAN FRANCISCO SECTIONAL
84th Edition, 11 Mar 2010

OBSTRUCTIONS
8 Apr 2010 No Major Changes.

AIRPORTS
8 Apr 2010 No Major Changes.

NAVAIDs
8 Apr 2010 No Major Changes.

AIRSPACE
8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
8 Apr 2010 No Major Changes.

MISCELLANEOUS
8 Apr 2010 No Major Changes.

SAN FRANCISCO TERMINAL AREA CHART
76th Edition, 11 Mar 2010

OBSTRUCTIONS
8 Apr 2010 No Major Changes.

AIRPORTS
8 Apr 2010 No Major Changes.

NAVAIDs
8 Apr 2010 No Major Changes.

AIRSPACE
8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
8 Apr 2010 No Major Changes.

MISCELLANEOUS
8 Apr 2010 No Major Changes.

WICHITA SECTIONAL
84th Edition, 14 Jan 2010

OBSTRUCTIONS
11 Feb 2010 Add obst 1665′MSL (349′AGL)UC, 36°21′39″N, 98°33′03″W.
Add obst 4492′MSL (350′AGL)UC, 38°07′04″N, 103°31′00″W.
Add obst 5430′MSL (350′AGL)UC, 39°50′33″N, 103°53′05″W.
8 Apr 2010 Add obst 1729′MSL (349′AGL)UC, 36°24′58″N, 98°44′43″W.
Add obst 2487′MSL (730′AGL)UC, 37°24′09″N, 98°34′52″W.
Add obst 3688′MSL (270′AGL)UC, 38°31′06″N, 101°29′49″W.
Add obst 1755′MSL (349′AGL)UC, 36°32′58″N, 98°15′31″W.
Add obst 2753′MSL (295′AGL)UC, 36°08′18″N, 99°32′31″W.

AIRPORTS
11 Feb 2010 Add RP 8 and RP 26 to MC PHERSON arpt, 38°21′08″N, 97°41′28″W.
8 Apr 2010 Change RP 8 to RP 18 at MC PHERSON arpt, 38°21′08″N, 97°41′28″W.

NAVAIDS
11 Feb 2010 – 8 Apr 2010 No Major Changes.

AIRSPACE
11 Feb 2010 – 8 Apr 2010 No Major Changes.

SPECIAL USE AIRSPACE
11 Feb 2010 – 8 Apr 2010 No Major Changes.

MILITARY TRAINING ROUTES
11 Feb 2010 – 8 Apr 2010 No Major Changes.

MISCELLANEOUS
11 Feb 2010 – 8 Apr 2010 No Major Changes.

SUPPLEMENTAL COMMUNICATION REFERENCE

Contained within this tabulation, and listed alphabetically by airport name, are all private–use airports charted on the U.S. IFR Enroute Low and High Altitude charts in the United States, having terminal approach and departure control facilities. Additionally, listed by country, are all Canadian and Mexican airports that appear on the U.S. IFR Enroute charts with approach and departure control services. All frequencies transmit and receive unless otherwise noted. Radials defining sectors are outbound from the facility.

UNITED STATES

FACILITY NAME	CHART & PANEL
Frankfort, IL (LL4Ø) Chicago App/Dep Con 133.1 285.6	L–28H
Glasgow Industrial, MT (Ø7MT) Salt Lake Center App/Dep Con 126.85 305.2	H–1E, 2F, L–13D
USAF Academy Bullseye Aux Airstrip, CO (CO9Ø) ASOS 118.325	L–10F
West Kentucky Airpark, KY (5KY3) Memphis Center App/Dep Con 133.65 292.15	L–16I
William P Gwinn, FL (Ø6FA) Gwinn Tower 120.4 279.25 (Mon–Fri 1300–2100Z‡) Gnd Con 121.65 279.25	H–8I, L–23C

CANADA

FACILITY NAME	CHART & PANEL
Abbotsford, BC (CYXX) ATIS 119.8 (1500–0700Z‡) Victoria Trml App/Dep Con 132.7 (Avbl on ground) 290.8 Tower 119.4 (Inner) 121.0 (Outer) 295.0 (1500–0700Z‡) Gnd Con 121.8 MF 119.4 295.0 (0700–1500Z‡) (Shape irregular to 4500′)	H–1B, L–12F
Amos/Magny, QC (CYEY) Montreal Center App/Dep Con 125.9	H–11B
Atikokan Muni, ON (CYIB) MF 122.3 (5 NM to 4500′ No ground station)	L–14I
Barrie–Orillia (Lake Simcoe Rgnl), ON (CYLS) AWOS 122.55 (Pvt) Toronto Center App/Dep Con 124.025	H–11B, L–31D
Bar River, ON (CPF2) Toronto Center App/Dep Con 132.65	L–31C
Bathurst, NB (CZBF) Moncton Center App/Dep Con 134.25	L–32J
Boundary Bay, BC (CZBB) ATIS 125.5 (1500–0700Z‡) Vancouver App/Dep Con 132.3 363.8 Tower 118.1 (Inner) 127.6 (Outer) (1500–0700Z‡) Gnd Con 124.3 MF 118.1 (0700–1500Z‡ to 2000′. Vancouver Trml 125.2 above 2000′. Shape irregular to 2500′.)	H–1B, L–1E
Brampton, ON (CNC3) Toronto Trml App/Dep Con 119.3 253.1	L–31D
Brandon Muni, MB (CYBR) Winnipeg Center App/Dep Con 132.25 285.4 MF 122.1 (5 NM to 4000′)	H–2H
Brantford, ON (CYFD) Toronto Trml App/Dep Con 128.27	L–31D
Brockville–Thousand Islands Rgnl Tackaberry, ON (CNL3) Montreal Center App/Dep Con 134.675	L–32G
Bromont, QC (CZBM) Montreal Center App/Dep Con 132.35 MF 122.15 (5 NM to 3400′)	L–32G
Burlington Airpark, ON (CZBA) Toronto Center App/Dep Con 119.3 253.1	L–31D
Castlegar/West Kootenay Rgnl, BC (CYCG) Vancouver Center App/Dep Con 134.2 227.3 MF 122.1 (5 NM to 6500′)	H–1C
Centralia/James T. Fld Muni, ON (CYCE) Toronto Center App/Dep Con 135.30	H–10G, 11B, L–31D
Charlottetown, PE (CYYG) Moncton Center App/Dep Con 135.65 384.8 MF 118.0 (5 NM to 3200′)	H–11E, L–32J
Chatham–Kent, ON (CNZ3) Cleveland Center App/Dep Con 132.25	H–10G, L–30G

FACILITY NAME	CHART & PANEL
Collingwood, ON (CNY3) Toronto Center App/Dep Con 124.02	H–11B, L–31D
Cornwall Rgnl, ON (CYCC) Boston Center App/Dep Con 135.25 377.1	L–32G
Cranbrook/Canadian Rockies Intl, BC (CYXC) Vancouver Center App/Dep Con 133.6 MF 122.3 (5 NM to 6100′)	H–1C
Debert, NS (CCQ3) Halifax Trml App/Dep Con 119.2	H–11E, L–32J
Digby, NS (CYID) Moncton Center App/Dep Con 123.9	L–32J
Downsview, ON (CYZD) Toronto Center App Con 133.4 Toronto Center Dep Con 133.4 MF 126.2 (1300–2300Z‡, 3 NM to 1700′)	H–11B, L–31E
Drummondville, QC (CSC3) Montreal Center App/Dep Con 132.35	L–32H
Earlton (Timiskaming Rgnl), ON (CYXR) MF 122.0 (5 NM to 3800′) AWOS 128.6	H–11B
Elliot Lake Muni, ON (CYEL) Toronto Center App/Dep Con 135.4	L–31C
Fort Frances Muni, ON (CYAG) Minneapolis Center App/Dep Con 120.9	L–14H
Fredericton Intl, NB (CYFC) ATIS 127.55 Moncton Center App/Dep Con 124.3 135.5 270.8 Tower 119.0 (1200–2000Z‡) Gnd Con 121.7 (Ltd hrs) MF 119.0 (2000–1200Z‡, 5 NM to 3500′)	H–11E, L–32I
Goderich, ON (CYGD) Toronto Center App/Dep 135.3 266.3	H–11B, L–31D
Greenwood, NS (CYZX) ATIS 128.85 244.3 (1100–0000Z‡) App/Dep Con 120.6 335.9 Tower 119.5 126.2 236.6 324.3 Gnd Con 133.75 289.4 Clnc Del 128.05 283.9	H–11E, L–32J
Grimsby Air Park, ON (CNZ8) Toronto Trml App/Dep Con 128.27 268.75 Tower 125.0 308.475	L–31E
Halifax/Shearwater, NS (CYAW) ATIS 129.175 (Ltd hrs) App/Dep Con 119.2 Tower 119.0 126.2 340.2 360.2 (Ltd hrs) Gnd Con 121.7 250.1	H–11E, L–32J
Halifax/Stanfield Intl, NS (CYHZ) ATIS 121.0 Moncton Center App/Dep Con 118.7 119.2 128.55 135.3 225.2 363.8 Tower 118.4 236.6 Gnd Con 121.9 275.8 Clnc Del 123.95 Apron Advisory 122.125	H–11E, L–32J
Hamilton, ON (CYHM) ATIS 128.1 Toronto Trml App/Dep Con 128.27 268.75 Tower 119.7 125.0 Gnd Con 121.6	H–10H, 11B, L–11B
Kingston, ON (CYGK) Montreal Center App/Dep Con 135.05 398.4 (0400–1115Z‡) MF 122.5 (1115–0400Z‡ 5 NM to 3300′)	H–11C, L–31E, 32F
Kitchener/Waterloo, ON (CYKF) ATIS 125.1 (1200–0400Z‡) Toronto Trml App/Dep Con 128.275 Waterloo Tower 126.0 118.55 (1200–0400Z‡) Gnd Con 121.8 MF 126.0 (0400–1200Z‡ 5 NM to 4000′)	H–11B, L–31D
Lachute, QC (CSE4) Montreal Center App Con 124.65 132.85 268.3 Montreal Center Dep Con 132.85 268.3	L–32G
La Tuque, QC (CYLQ) Montreal Center App/Dep Con 134.5	H–11C
Langley, BC (CYNJ) ATIS 124.5 (1630–0230Z, DT 1530–0330Z) Victoria Trml 132.7 290.8 Tower 119.0 (1630–0230Z, DT 1530–0330Z) Gnd Con 121.9 MF 119.0 (0230–1630Z, DT 0330–1530Z 3 NM to 1900′)	L–1E

FACILITY NAME	CHART & PANEL
Leamington, ON (CLM2) Cleveland Center App/Dep Con 132.45	L–30F
Lethbridge, AB (CYQL) ATIS 124.4 (1300–0545Z‡) Edmonton Center App/Dep Con 132.75 265.2 MF 121.0 (5 NM to 6000′)	H–1D
Lindsay, ON (CNF4) Toronto Center App/Dep 134.25	L–31E, L–32F
Liverpool/South Shore Rgnl, NS (CYAU) Moncton Center App/Dep Con 123.9	L–32J
London, ON (CYXU) ATIS 127.8 (1120–0345Z‡) Toronto Center App/Dep 135.3 135.625 Tower 119.4 125.65 (1120–0345Z‡) Gnd Con 121.9 MF 119.4 (0345–1120Z‡ 5 NM to 3000′)	H–10G, 11B, L–30G, 31D
Manitowaning/Manitoulin East Muni, ON (CYEM) Toronto Center App/Dep 135.4 260.9	L–31C
Maniwaki, QC (CYMW) Montreal Center App/Dep Con 126.57	L–32G
Mascouche, QC (CSK3) MF 122.35 (5 NM to 2500′. No gnd station. Excluding the portion S of the N shore of Riviere des Milles–Iles and 1 NM around Lac Agile Mascouche arpt.)	L–32G
Medicine Hat, AB (CYXH) AWOS 124.875 (0345–1245Z‡) MF 122.2 (1245–0345Z‡ 5 NM to 5400′)	H–1D
Midland/Huronia, ON (CYEE) Toronto Center App/Dep 124.025	L–31D
Miramichi, NB (CYCH) Moncton Center App/Dep Con 123.7	H–11E, L–32J
Moncton/Greater Moncton Intl, NB (CYQM) ATIS 128.65 App/Dep 124.4 Tower 120.8 236.6 Gnd Con 121.8 275.8 Apron Advisory 122.075	H–11E, L–32J
Mont–Laurier, QC (CSD4) Montreal Center App/Dep Con 126.57	L–32G
Montreal Intl (Mirabel), QC (CYMX) ATIS 125.7 Montreal Center App Con 124.65 132.85 268.3 Montreal Dep Con 132.85 MF 119.1 (7 NM shape irregular to 2000′) VFR Advisory 134.15	H–11C, 12K, L–32G
Montreal/Pierre Elliott Trudeau Intl, QC (CYUL) ATIS 133.7 Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3 Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075 Montreal Trml Dep Con 118.9 (SE–S–SW) 124.65 268.3 (W–NW–NE) VFR Advisory 134.15	H–11C, 12K, L–32G
Montreal/St–Hubert, QC (CYHU) ATIS 124.9 (Apr–Oct 1045–0500Z‡, Nov–Mar 1045–0400Z) AWOS 124.9 Montreal Center App/Dep Con 125.15 268.3 St. Hubert Tower 118.4 (Apr–Oct 1045–0500Z‡, Nov–Mar 1045–0400Z) Gnd Con 126.4 MF 118.4 (Apr–Oct 0500–1045Z‡, Nov–Mar 0400–1045Z 5 NM shape irregular to 2500′) VFR Advisory 134.15	H–11C, L–32G
Muskoka, ON (CYQA) AWOS 124.575 MF 122.3 (5 NM to 3900′)	H–11B, L–31D
Nanaimo, BC (CYCD) Victoria Trml App/Dep 120.8 133.95 252.3 MF 122.1 1330–0530Z‡ (5 NM to 2500′)	H–1B, L–1E
North Bay, ON (CYYB) ATIS 124.9 (1130–0300Z‡) Toronto Center App/Dep 121.225 127.25 MF 118.3 (1130–0330Z‡ 7 NM to 5000′)	H–11B, L31D
Oshawa, ON (CYOO) ATIS 125.675 (1130–0330Z‡) Toronto Trml App Con 133.4 Tower 120.1 (1130–0330Z‡) Gnd Con 118.4 Toronto Trml Dep Con 133.4 MF 120.1 (0330–1130Z‡ 5 NM to 3000′)	L–31E

FACILITY NAME	CHART & PANEL
Ottawa/Carp, ON (CYRP) ATIS 121.15 Ottawa Trml App/Dep Con 128.175 252.5	L–31E, 32F
Ottawa/Gatineau, QC (CYND) Ottawa Trml App/Dep Con 127.7 128.175 252.5 MF 122.3 (5 NM shape irregular to 2500′) VFR Advisory Ottawa Trml 127.7	H–11C, L–32G
Ottawa/MacDonald–Cartier Intl, ON (CYOW) ATIS 121.15 Ottawa App Con 135.15 Tower 118.8 120.1 341.3 Gnd Con 121.9 Clnc Del 119.4 Ottawa Dep Con 128.175	L–11C
Owen Sound/Billy Bishop Rgnl, ON (CYOS) Toronto Center App/Dep 132.575 290.6	L–31D
Pelee Island, ON (CYPT) Cleveland Center App/Dep Con 126.35 360.0	L–30F
Pembroke, ON (CYTA) Montreal Center App/Dep Con 135.2 Petawawa Advisory 126.4 250.1 (Mon–Fri 1300–2130Z‡, OT PPR)	H–11C, L–31E, 32F
Penticton, BC (CYYF) Vancouver Center App/Dep Con 133.5 351.3 MF 118.5 (5 NM to 4100′)	H–1B
Peterborough, ON (CYPQ) AWOS 126.925 Toronto Center App/Dep 134.25	H–11B, L–31E, 32F
Pincher Creek, AB (CZPC) Edmonton Center App/Dep Con 132.75 265.2	H–1D
Pitt Meadows, BC (CYPK) ATIS 125.0 (1500–0700Z‡) Vancouver Center App Con 128.6 352.7 (Outer) Pitt Tower 126.3 (1500–0700Z‡) Gnd Con 123.8 Vancouver Center Dep Con 132.3 363.8 (South) MF 126.3 (0700–1500Z‡) (3NM to 2500′)	L–1E
Quebec/Jean Lesage Intl, QC (CYQB) ATIS 134.6 Montreal Center App/Dep Con 124.0 127.85 135.025 270.9 322.8 Tower 118.65 236.6 Gnd Con 121.9 250.0	H–11D, L–32H
Riviere Du Loup, QC (CYRI) AWOS 122.025 (Pvt) Montreal Center App/Dep Con 125.1 299.6	H–11D
Rouyn Noranda, QC (CYUY) Montreal Center App/Dep Con 125.9 MF 122.2 (5 NM to 4000′)	H–11B
Saint John, NB (CYSJ) Moncton Center App/Dep Con 124.3 135.5 270.8 MF 118.5 (5 NM to 3400′)	H–11E, L–32J
Sarnia (Chris Hadfield), ON (CYZR) Toronto Center 134.375	H–10G, 11B, L–30F
Sault Ste Marie, ON (CYAM) ATIS 133.05 (1300–0100Z‡) Toronto Center App/Dep Con 132.65 344.5 Tower 118.8 (1300–0100Z‡) Gnd Con 121.7 MF 118.8 (0100–1300Z‡ 5 NM irregular shape to 3000′)	H–2K, L–31B
Sherbrooke, QC (CYAM) AWOS 126.25 Montreal Center App/Dep Con 132.55 MF 123.5 (Ltd hrs 5 NM to 3800′)	H–11D, L–32H
South Renfrew Muni, ON (CNP3) Montreal Center App/Dep 124.275	L–31E, 32F
Southport, MB (CYPG) ATIS 120.85 (Mon–Fri 1400–2300Z‡ except holidays) Tower 126.2 384.2 (Mon–Fri 1400–2300Z‡ except holidays) Gnd Con 121.7 275.8	H–2H

FACILITY NAME	CHART & PANEL
Springwater Barrie Airpark, ON (CNA3) Toronto Center App/Dep Con 124.025	L–31D
St. Catherines/Niagara District, ON (CYSN) ATIS 128.525 (1215–0200Z‡) Toronto Trml App/Dep Con 133.4 253.1 MF 123.25 (1215–0200Z‡ 5 NM to 3300′)	H–10H, 11B, L–31E
St. Frederic, QC (CSZ4) Montreal Center App/Dep Con 135.025 270.9	L–32H
St. Georges, QC (CYSG) Montreal Center App/Dep Con 132.35 MF 122.15 (5 NM 3900′ ASL)	H–32H, L–11D
St. Jean, QC (CYJN) Montreal Center App/Dep Con 125.15 268.3 Tower 118.2 (Apr–Oct 1230–0230Z‡ Nov–Mar 1300–0200Z‡) Gnd Con 121.7	L–32G
Sudbury, ON (CYSB) ATIS 127.4 Toronto Center App/Dep Con 135.5 MF 125.5 (7 NM to 4000′)	H–31B, 10G, L–31D
Summerside, PE (CYSU) AWOS 122.55 (Pvt) Moncton Center App/Dep Con 124.4 384.8	H–11E, L–32J
Thunder Bay, ON (CYQT) ATIS 128.8 (1100–0400Z‡) Winnipeg Center App/Dep Con 132.125 (0400–1100Z‡) Tower 118.1 (1100–0400Z‡) Gnd Con 121.9 App/Dep 119.2 MF 118.1 (0400–1100Z‡ 5 NM to 4000′)	H–2J, L–14J
Timmins/Victor M. Power, ON (CYTS) ATIS 124.95 (1000–0500Z‡) Toronto Center App/Dep Con 128.3 MF 122.3 (5 NM to 4000′)	H–11B
Toronto/Buttonville Muni, ON (CYKZ) ATIS 127.1 (1200–0400Z‡) Toronto Center App Con 133.4 Toronto Center Dep Con 133.4 Tower 124.8 119.9 (1200–0400Z‡) Gnd Con 121.8 MF 124.8 (0400–1200Z‡ No gnd station. 5 NM shape irregular to below 2500′)	L–31E
Toronto/Billy Bishop Toronto City Airport, ON (CYTZ) ATIS 133.6 (1130–0400Z‡) App Con 133.4 Dep Con 133.4 Tower 118.2 119.2 (1130–0400Z‡) Gnd Con 121.7	L–31E
Toronto/Lester B Pearson Intl, ON (CYYZ) ATIS 120.825 App Con 124.475 125.4 132.8 Dep Con 127.575 128.8 Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9 Clnc Del 121.3 (1200–0400Z‡)	H–11B, L–31D
Trenton, ON (CYTR) ATIS 135.45 257.7 App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8 Clnc Del 124.35 286.4	H–11C, L–31E, 32F
Trenton/Mountain View, ON (CPZ3) Trenton Mil Advisory 268.0	H–11C, L–31E, 32F
Trois–Rivieres, QC (CYRQ) Montreal Center App/Dep Con 128.225 229.2 MF 123.0 (5 NM to 3200′)	H–11C, L–32H
Val–D'or, QC (CYVO) Montreal Center App/Dep Con 125.9 308.3 MF 118.5 (1030–0325Z‡ 5 NM to 4000′)	H–11B
Vancouver Intl, BC (CYVR) ATIS 124.6 124.75 App Con 128.6 128.17 352.7 (Outer) 133.1 134.225 352.7 (Inner) Dep Con 126.125 (north) 132.3 (south) 363.8 Tower 118.7 (south) 119.55 (north) VFR 124.0 125.65 226.5 236.6 Gnd Con 121.7 (south) 127.15 (north) 275.8 Clnc Del 121.4	H–1B, L–1E

FACILITY NAME	CHART & PANEL
Victoria Intl, BC (CYYJ) ATIS 118.8 (1400–0800Z‡) App Con 125.95 308.4 Dep Con 133.85 308.4 Tower 119.1 (Outer) 119.7 (Inner) 239.6 Gnd Con 121.9 361.4 (1400–0800Z‡ OT ctc Kamloops 119.7) Clnc Del 126.4 (1400–0800Z‡)	H–1B, L–1E
Victoriaville, QC (CSR3) Montreal Center App Con 132.35	L–32H
Waterville/Kings Co Muni, NS (CCW3) Greenwood Trml App/Dep Con 120.6 335.9 Greenwood Tower 119.5 324.3	L–32J
Wiarton, ON (CYVV) Toronto Center App/Dep Con 132.575 MF 122.2 (5 NM to 3700′)	H–11B, L–31D
Windsor, ON (CYQG) ATIS 134.5 (1130–0330Z‡) Detroit App/Dep Con 126.85 127.5 134.3 348.3 363.2 Tower 124.7 (1130–0330Z‡) Gnd Con 121.7 MF 124.7 (0330–1130Z‡ 6 NM irregular shape to below 3000′) VFR Advisory Detroit App Con 134.3	H–10G, L–8J
Yarmouth, NS (CYQI) Moncton Center App/Dep Con 123.9 368.5 MF 123.0 (5 NM to 3100′)	H–11E, L–32I

MEXICO

FACILITY NAME	CHART & PANEL
Abraham Gonzalez Intl (MMCS) Juarez App Con 119.9 Juarez Tower 118.9	H–4K, L–6F
Del Norte Intl (MMAN) ATIS 127.55 (1300–0300Z‡) Monterrey App 119.75 120.4 Tower 118.6	H–7B, L–20G
Durango Intl (MMDO) ATIS 132.1 Tower 118.1 Durango Info 122.3	H–7A
General Abelardo L Rodriguez Intl (MMTJ) ATIS 127.9 Tijuana App Con 119.5 120.3 Tijuana Tower 118.1 Clnc Del 122.35 Tijuana Info 132.1	H–4H, L–4H
General Lucio Blanco Intl (MMRX) Reynosa App Con 118.8 Reynosa Tower 118.8	H–7B, L–20H
General Mariano Escobedo Intl (MMMY) ATIS 127.7 Monterrey App Con 119.75 120.4 Monterrey Tower 118.1 Gnd Con 121.9	H–7B, L–20G
General R Fierro Villalobos Intl (MMCU) ATIS 127.9 Chihuahua App Con 121.0 Chihuahua Tower 118.4	L–6I
General Rodolfo Sanchez Taboada Intl (MMML) ATIS 127.6 Mexicali App Con 118.2 Mexicali Tower 118.2 Mexicali Info 123.9 122.3	H–4H, L–4J, 5A
General Servando Canales (MMMA) Matamoros App Con 118.0 Matamoros Tower 118.0	H–7C, L–21A
Plan De Guadalupe Intl (MMIO) Saltillo App Con 127.4 Saltillo Tower 118.4	H–7B
Quetzalcoatl Intl (MMNL) Nuevo Laredo App Con 118.3 Nuevo Laredo Tower 118.3	H–7B, L–20G
Torreon Intl (MMTC) App Con 119.6 Tower 118.5	H–7A

In support of the Federal Aviation Administration's Runway Incursion Program, selected towered airport diagrams have been published in the Airport Diagram section of the A/FD. Diagrams will be listed alphabetically by associated city and airport name. Airport diagrams, depicting runway and taxiway configurations, will assist both VFR and IFR pilots in ground taxi operations. The airport diagrams in this publication are the same as those published in the U.S. Terminal Procedures Publications. For additional airport diagram legend information see the U.S. Terminal Procedures Publication.

NOTE: Some text data published under the individual airport in the front portion of the A/FD may be more current than the data published on the Airport Diagrams. The airport diagrams are updated only when significant changes occur.

GENERAL INFORMATION

PILOT CONTROLLED AIRPORT LIGHTING SYSTEMS

Available pilot controlled lighting (PCL) systems are indicated as follows:

1. Approach lighting systems that bear a system identification are symbolized using negative symbology, e.g., (A1), (V), (✿)
2. Approach lighting systems that do not bear a system identification are indicated with a negative "(L)" beside the name.

A star (★) indicates non-standard PCL, consult the individual airport in the front portion of the A/FD, e.g., (L★)

To activate lights use frequency indicated in the communication section of the chart with a (L) or the appropriate lighting system identification e.g., UNICOM 122.8 (L), (A1), (V)

KEY MIKE	FUNCTION
7 times within 5 seconds	Highest intensity available
5 times within 5 seconds	Medium or lower intensity (Lower REIL or REIL-off)
3 times within 5 seconds	Lowest intensity available (Lower REIL or REIL-off)

CHART CURRENCY INFORMATION

FAA procedure amendment number → Amdt 11A 99365 → Date of latest change
FAA procedure amendment number → Orig 00365 → Date of latest change

The Chart Date indentifies the Julian date the chart was added to the volume or last revised for any reason. The first two digits indicate the year, the last three digits indicate the day of the year (001 to 365/6) in which the latest addition or change was first published.

The Procedure Amendment Number precedes the Chart Date, and changes any time instrument information (e.g., DH, MDA, approach routing, etc.) changes. Procedure changes also cause the Chart Date to change.

MISCELLANEOUS

★ Indicates a non-continuously operating facility, see the individual airport in the front portion of the A/FD.
Indicates control tower temporarily closed UFN.

10042
LEGEND

INSTRUMENT APPROACH PROCEDURES (CHARTS)

AIRPORT DIAGRAM/AIRPORT SKETCH

Runways

Hard Surface | Other Than Hard Surface | Stopways,Taxiways, Parking Areas, Water Runways | Displaced Threshold

Closed Runway | Closed Taxiway | Under Construction | Metal Surface

ARRESTING GEAR: Specific arresting gear systems; e.g., BAK12, MA-1A etc., shown on airport diagrams, not applicable to Civil Pilots. Military Pilots refer to appropriate DOD publications.

uni-directional | bi-directional | Jet Barrier

ARRESTING SYSTEM

REFERENCE FEATURES

Buildings
Tanks
Obstructions
Airport Beacon #
Runway
Radar Reflectors
Control Tower #
Hot Spot

When Control Tower and Rotating Beacon are co-located, Beacon symbol will be used and further identified as TWR.

Runway length depicted is the physical length of the runway (end-to-end, including displaced thresholds if any) but excluding areas designated as stopways.

A D symbol is shown to indicate runway declared distance information available, see appropriate A/FD, Alaska or Pacific Supplement for distance information.

Helicopter Alighting Areas

Negative Symbols used to identify Copter Procedures

landing point

Runway Threshold elevation.....THRE 123
Runway TDZ elevation.....TDZE 123
Runway Slope.....0.3% DOWN / 0.8% UP
(shown when runway slope is greater than or equal to 0.3%)

NOTE:
Runway Slope measured to midpoint on runways 8000 feet or longer.

U.S. Navy Optical Landing System (OLS) "OLS" location is shown because of its height of approximately 7 feet and proximity to edge of runway may create an obstruction for some types of aircraft.

Approach light symbols are shown in the Flight Information Handbook.

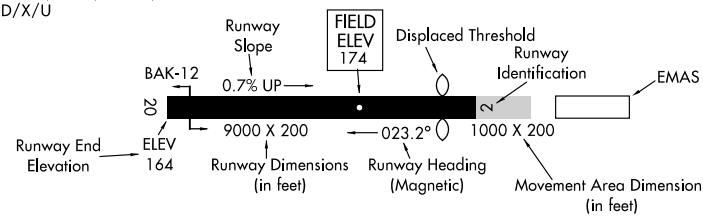
Airport diagram scales are variable.

True/magnetic North orientation may vary from diagram to diagram

Coordinate values are shown in 1 or ½ minute increments. They are further broken down into 6 second ticks, within each 1 minute increments.

NOTE:
All new and revised airport diagrams are shown referenced to the World Geodetic System (WGS) (noted on appropriate diagram), and may not be compatible with local coordinates published in FLIP. (Foreign Only)

Runway Weight Bearing Capacity/or PCN Pavement Classification Number is shown as a codified expression.
Refer to the appropriate Supplement/Directory for applicable codes e.g.,
RWY 14-32 S75, T185, ST175, TT325
PCN 80 F/D/X/U



SCOPE

Airport diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway/taxiway configurations and provide information for updating Computer Based Navigation Systems (I.E., INS, GPS) aboard aircraft. Airport diagrams are not intended to be used for approach and landing or departure operations. For revisions to Airport Diagrams: Consult FAA Order 7910.4.

HOT SPOTS

An ''Airport surface hot spot'' is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A ''hot spot'' is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles designated as ''HOT[1]'', ''HOT[2]'', etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION
ARIZONA		
MESA		
FALCON FLD (FFZ)	HOT[1]	Acft approaching Twy D from the ramp and destined for Rwy 04R or Rwy 22L sometimes miss the turn into Twy D.
PHOENIX		
PHOENIX–MESA GATEWAY (IWA)	HOT[1]	Twy V, Twy B, and Twy K complex intersection.
TUCSON		
RYAN FLD (RYN)	HOT[1]	Air traffic often taxies acft via Twy B and onto Rwy 33 for departure on Rwy 06R. Use caution not to enter Rwy 6R without ATC authorization.
TUCSON		
TUCSON INTL (TUS)	HOT[1]	Complex intersecion.
	HOT[2]	Pilots instructed to hold short of Rwy 11L–29R or Rwy 11R–29L sometimes cross the approach area of these rwys without authorization.
	HOT[3]	Rwy 29R sometimes mistaken for Rwy 29L.
CALIFORNIA		
CONCORD		
BUCHANAN FIELD (CCR)	HOT[1]	Pilots traveling southeast on Twy J and instructed to taxi via Twy E to Rwy 01L or Rwy 19R sometimes miss the turn onto Twy E and proceed onto Rwy 01L–19R at Twy J without clearance.
	HOT[2]	Pilots departing the Rwy 32L run–up area sometimes mistake Twy J for Twy 32L.
	HOT[3]	Complex intersection at Rwy 01R–19L, Twy J, Twy A, Twy C and Twy K.
	HOT[4]	Pilots on Twy A sometimes fail to comply with hold short instructions for Rwy 32L apch area.
HAWTHORNE		
JACK NORTHROP FIELD/ HAWTHORNE MUNI (HHR)	HOT[1]	Rwy 25 run-up area, do not depart the run-up area without ATC clearance.
HAYWARD		
HAYWARD EXECUTIVE (HWD)	HOT[1]	Acft approaching Twy A from the ramp sometimes fail to turn onto Twy A, proceeding onto Twy E and ultimately Rwy 10L–28R.
	HOT[2]	Area not visible from ATCT.
	HOT[3]	Area not visible from ATCT.
LONG BEACH		
LONG BEACH DAUGHERTY FLD (LGB)	HOT[1]	Acft exiting Rwy 30 at Twy A turn left on Twy D, anticipate reaching their destination, and fail to hold short of Rwy 07L–25R.
	HOT[2]	Acft northbound on Twy B and instructed to hold short of Rwy 12–30 at Twy K sometimes miss the turn onto Twy K and proceed straight ahead onto Rwy 12–30 and Rwy 07L–25R.
	HOT[3]	Acft southbound on Twy B anticipate reaching their destination parking ramp and fail to hold short of Rwy 07R–25L.

	HOT[4]	Acft eastbound on Twy J instructed to taxi to Rwy 25L at Twy D sometimes miss the turn onto Twy D and proceed onto Rwy 12–30 without authorization.
	HOT[5]	Acft taxiing to Rwy 16R from the southwest ramp sometimes miss the left turn onto Twy B, continue eastbound onto Twy F, and enter Rwy 16R–34L.
	HOT[6]	After completing a run-up on inactive Rwy 34R, acrft sometimes fail to hold short of Rwy 07R–25L.
	HOT[7]	Acft ldg Rwy 30, be aware that this rwy crosses every other rwy at the arpt. When exiting, pilots should ensure they are following a yellow, ''lead-off'' line onto a rwy.
MERCED		
CASTLE (MER)	HOT[1]	Complex area. Verify correct taxi route. Areas south of Twy A and Twy G are private ramp.
	HOT[2]	Tfc congestion due to large volume of aircraft proceeding to and from Rwy 31.
NAPA		
NAPA COUNTY (APC)	HOT[1]	Twy A, Twy C, Twy E, and the ramp. Complex intersection and high density tfc area.
	HOT[2]	Rwy 24, Twy A. Acft and vehicles transiting to and from the hangars via Twy A sometimes cross Rwy 24 at Twy A without clearance.
	HOT[3]	Rwy 24 and Rwy 36L. Acft taxiing on Rwy 24, do not cross Rwy 36L without clearance. Acft taxiing on Rwy 36L, do not cross Rwy 24 without clearance.
OAKLAND		
METROPOLITAN OAKLAND INTL (OAK)	HOT[1]	Twy A and Twy B both cross Rwy 27R. Pilots sometimes mistake Twy A for Twy B, and vice versa. Verify correct taxi route.
	HOT[2]	Acft departing the ramp sometimes miss their turn onto Twy C or Twy D, mistakenly proceeding onto Twy H or Twy G and ultimately Rwy 09L–27R.
	HOT[3]	Complex intersection. Pilots sometimes taxi onto Rwy 09L or Rwy 33 by mistake.
PALM SPRINGS		
PALM SPRINGS INTL (PSP)	HOT[1]	Pilots sometimes mistake Twy C for Rwy 13R–31L or Rwy 13L–31R.
	HOT[2]	Pilots instructed to taxi to Rwy 13R via Twy B and Twy C sometimes miss the turn onto Twy C and proceed onto Rwy 31R without authorization.
	HOT[3]	Pilots approaching Rwy 31R on Twy B sometimes fail to hold short of Rwy 31R.
SACRAMENTO		
SACRAMENTO INTL (SMF)	HOT[1]	Acft approaching Twy A from the east on Twy A–10 sometimes miss the turn onto Twy A.
SALINAS		
SALINAS MUNI (SNS)	HOT[1]	Acft instructed to taxi from the ramp to Rwy 31 sometimes miss the turn onto Twy A and continue along Twy E, subsequently entering Rwy 31 without ATC authorization.
	HOT[2]	Acft instructed to taxi from the ramp to Rwy 26 sometimes miss the burn onto Twy C and continue along Twy A, subsequently entering Rwy 26 at Twy A without ATC authorization.
SAN FRANCISCO		
SAN FRANCISCO INTL (SFO)	HOT[1]	Pilots instructed to follow Twy B south sometimes continue onto Twy J or Twy F by mistake.
	HOT[2]	Pilots taxiing east on Twy C and instructed on turn right onto Twy E sometimes miss the turn onto Twy E and continue across Rwy 01L–19R by mistake.
SAN JOSE		
NORMAN Y. MINETA SAN JOSE INTL (SJC)	HOT[1]	Pilots assigned Rwy 29 for ldg sometimes land Rwy 30L by mistake. Pilots proceeding into, or exiting, the Rwy 29 run-up area sometimes enter Rwy 29 without ATC authorization.

SANTA ANA		
JOHN WAYNE AIRPORT/ORANGE CO (SNA)	HOT[1]	ATC often instructs pilots to ''Taxi up to and hold short'' of Rwy 19L and Rwy 19R. As with normal hold short instruction, one must always stop short of the Runway Holding Position Markings.
	HOT[2]	Pilots exiting Rwy 19R or Rwy 19L onto Twy H: short distance between rwys. Expect to hold short of the parallel rwy. Manage your taxi speed. Do not cross the Runway Holding Position Markings for the parallel rwy without ATC authorization.
	HOT[3]	Pilots taxiing via Twy A, Twy H, and Twy C sometimes miss the turn from Twy H to Twy C.
SANTA BARBARA		
SANTA BARBARA MUNI (SBA)	HOT[1]	Pilots are sometimes confused by the angle at which Twy C intersects Rwy 07–25.
	HOT[2]	Very wide pavement area. Do not cross Rwy 15L or Rwy 15R without authorization.
	HOT[3]	ATC often utilizes Rwy 15L–33R and Rwy 15R–33L to taxi arriving aircraft off of Rwy 07–25.
	HOT[4]	Pilots instructed to taxi to Rwy 35 sometimes miss the turn onto Twy J, not realizing that the approach end of Rwy 25 begins at Twy J.

COLORADO

ASPEN		
ASPEN–PITKIN COUNTY/SARDY FIELD (ASE)	HOT[1]	Twy A2. Short taxi distance from ramp to rwy.
	HOT[2]	Twy A on west edge of ramp. Passengers and vehicles are required to stay east of Twy A unless cleared by ATC.
	HOT[3]	Twy A4. Short taxi distance from ramp to rwy.
DENVER		
CENTENNIAL (APA)	HOT[1]	Intersection Twy A–1. Hold line across run–up area.
	HOT[2]	Twy A, Twy A–8, Twy A–9 and Twy C–1 congested intersections.
	HOT[3]	Twy C–1 and Twy D–1 close proximity to Rwy 10.
DENVER		
ROCKY MOUNTAIN METROPOLITAN (BJC)	HOT[1]	Frequent helicopter operations on north ends of Twy B and Rwy 02–20. Use caution in this area.
EAGLE		
EAGLE COUNTY RGNL (EGE)	HOT[1]	High density parking area on ramp east of Twy C–2. Air carrier aircraft should not leave or enter taxiway A east of Twy C–2.

NEVADA

LAS VEGAS		
MC CARRAN INTL (LAS)	HOT[1]	Exiting the ramp, use caution at Twy S not to cross the rwy holding position markings for Rwy 19L. Twy S intersects with Twy D, Twy Z, and Twy G, which require a turn to the north or south.
	HOT[2]	Exiting Rwy 01R–19L use caution not to enter Twy U, and avoid entering Rwy 01L–19R without authorization.
	HOT[3]	Exiting Rwy 01R–19L use caution not to enter Twy Y, and avoid entering Rwy 01L–19R without authorization.
	HOT[4]	Rwy holding position markings for Rwy 07L and Rwy 01L are co-located, and located north of Rwy 07L. Verify rwy heading and alignment with proper rwy prior to departure.
	HOT[5]	Twy E is often misidentified as a rwy. Verify rwy markings prior to departure.
LAS VEGAS		
NORTH LAS VEGAS (VGT)	HOT[1]	ATC often requires Rwy 12R departures to hold short of Rwy 07. Common mistake is to cross Rwy 07 without ATC authorization.

	HOT[2]	Pilots sometimes enter or cross Rwy 12R without authorization.
	HOT[3]	Pilots taxiing east on Twy A and destined for Rwy 30L sometimes miss the turn onto Twy B, proceeding onto Rwy 12R without ATC authorization.
	HOT[4]	Pilots taxiing east on Twy A sometimes fail to hold short of Rwy 12L, or neglect to turn onto Rwy 12L for departure, instead departing on Twy A.
RENO		
RENO/TAHOO INTL (RNO)	HOT[1]	Pilots departing the southwest ramp and instructed to hold short of Rwy 07–25 sometimes fail to comply.
	HOT[2]	Pilots northbound on Twy C sometimes proceed straight ahead into the ramp by mistake.
	HOT[3]	Full length departures for Rwy 16L sometimes turn left at Twy D by mistake.

UTAH

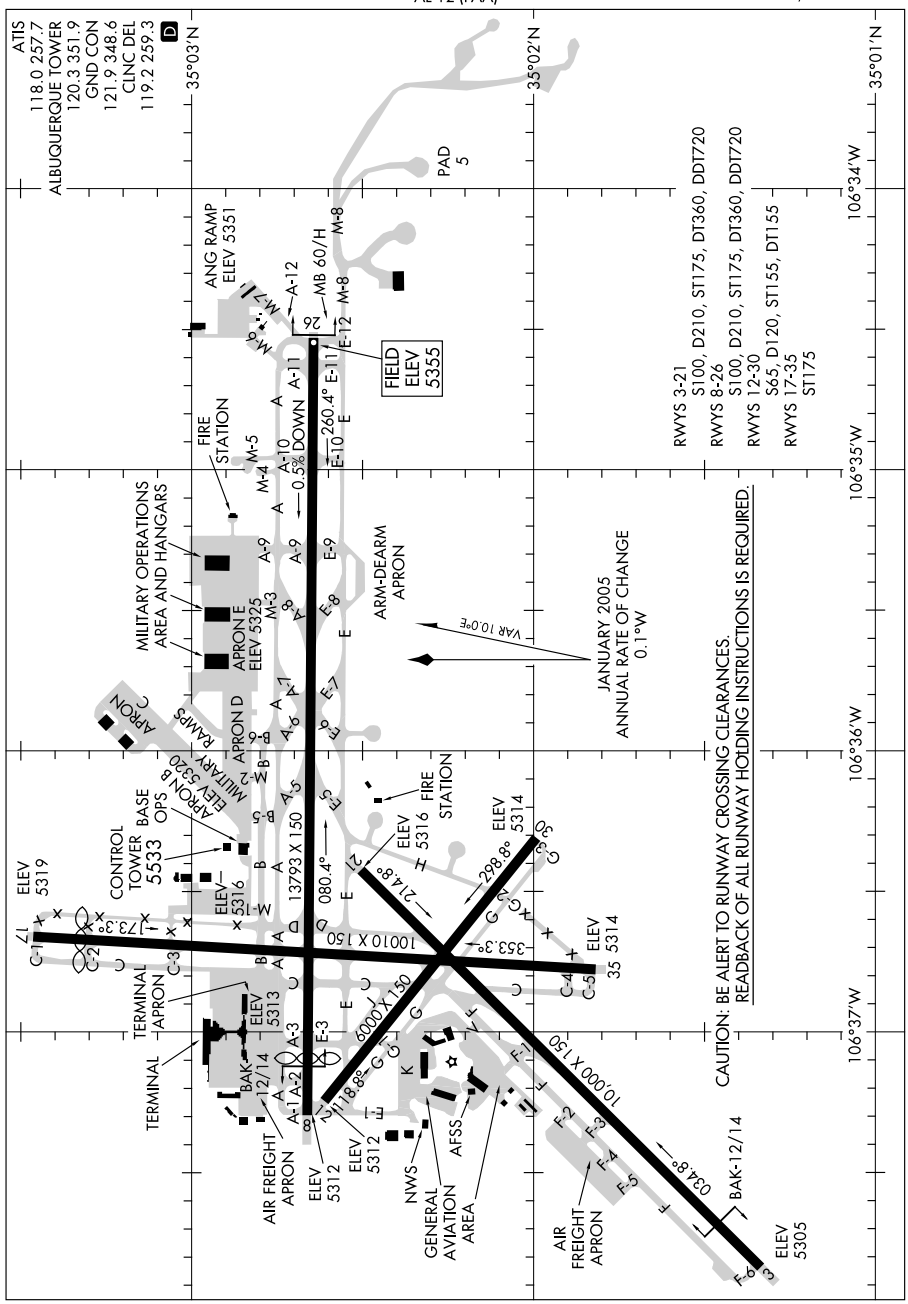
PROVO		
PROVO MUNI (PVU)	HOT[1]	Pilots taxiing to Rwy 13 often take Twy A–3 instead of Twy A. Twy A–3 leads to intersection of two rwys.
SALT LAKE CITY		
SALT LAKE CITY INTL (SLC)	HOT[1]	Caution do not cross hold line for Rwy 35 during taxi SE on Rwy 14–32. Hold line is on north side of Rwy 32 numbers.
	HOT[2]	Possible confusion between ramp, twy and rwy due to large paved area. Do not cross rwy hold lines without ATC clearance. ATC clearance is needed to enter the movement area, which is immediately west of vehicle drive lanes and marked by movement/nonmovement boundary line.

09351

AIRPORT DIAGRAM

ALBUQUERQUE INTL SUNPORT (ABQ)
ALBUQUERQUE, NEW MEXICO

AL-12 (FAA)



AIRPORT DIAGRAM
09351
ALBUQUERQUE, NEW MEXICO
ALBUQUERQUE INTL SUNPORT (ABQ)

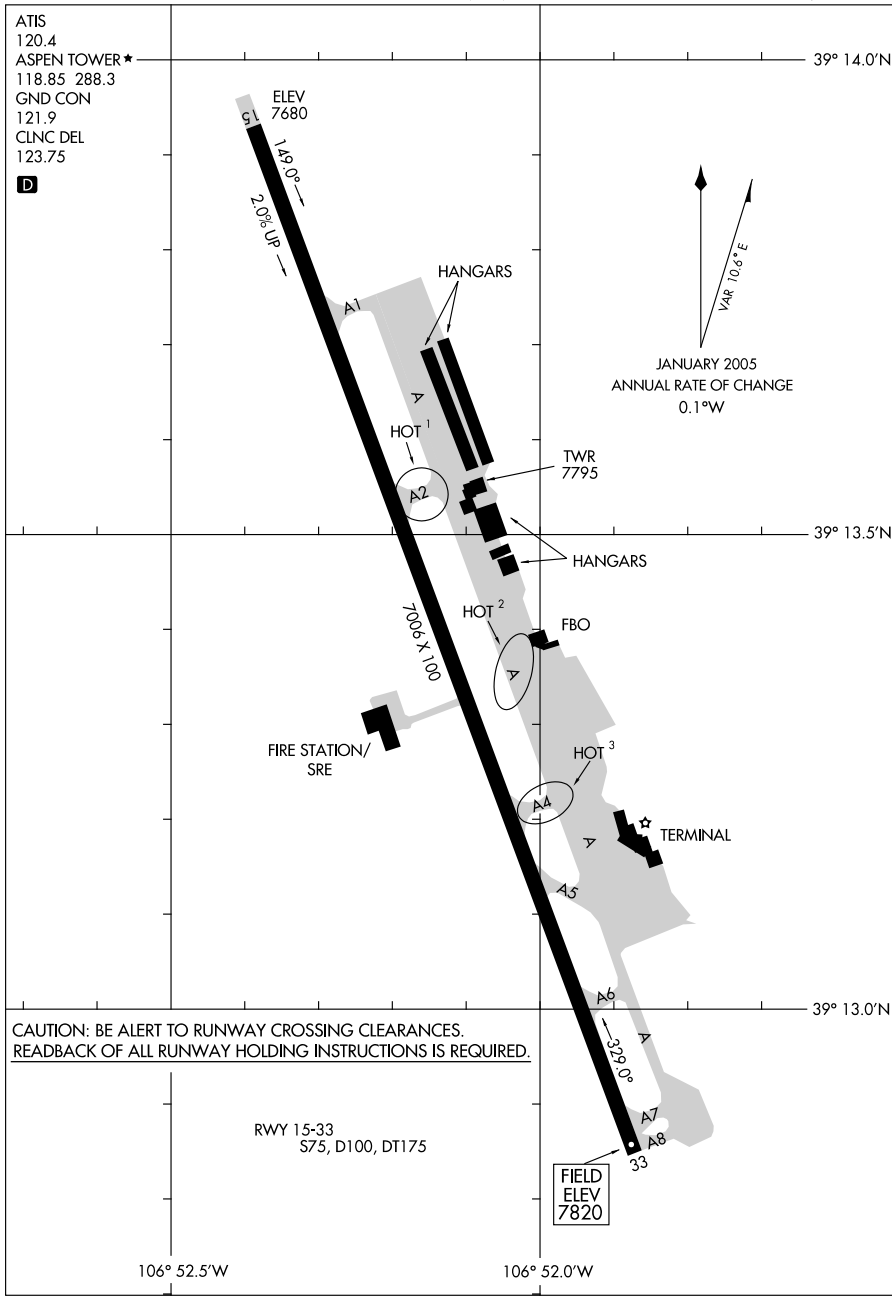
10098

AIRPORT DIAGRAM

ASPEN-PITKIN COUNTY/SARDY FIELD (ASE)

AL-5889 (FAA)

ASPEN, COLORADO



AIRPORT DIAGRAM

10098

ASPEN, COLORADO

ASPEN-PITKIN COUNTY/SARDY FIELD (ASE)

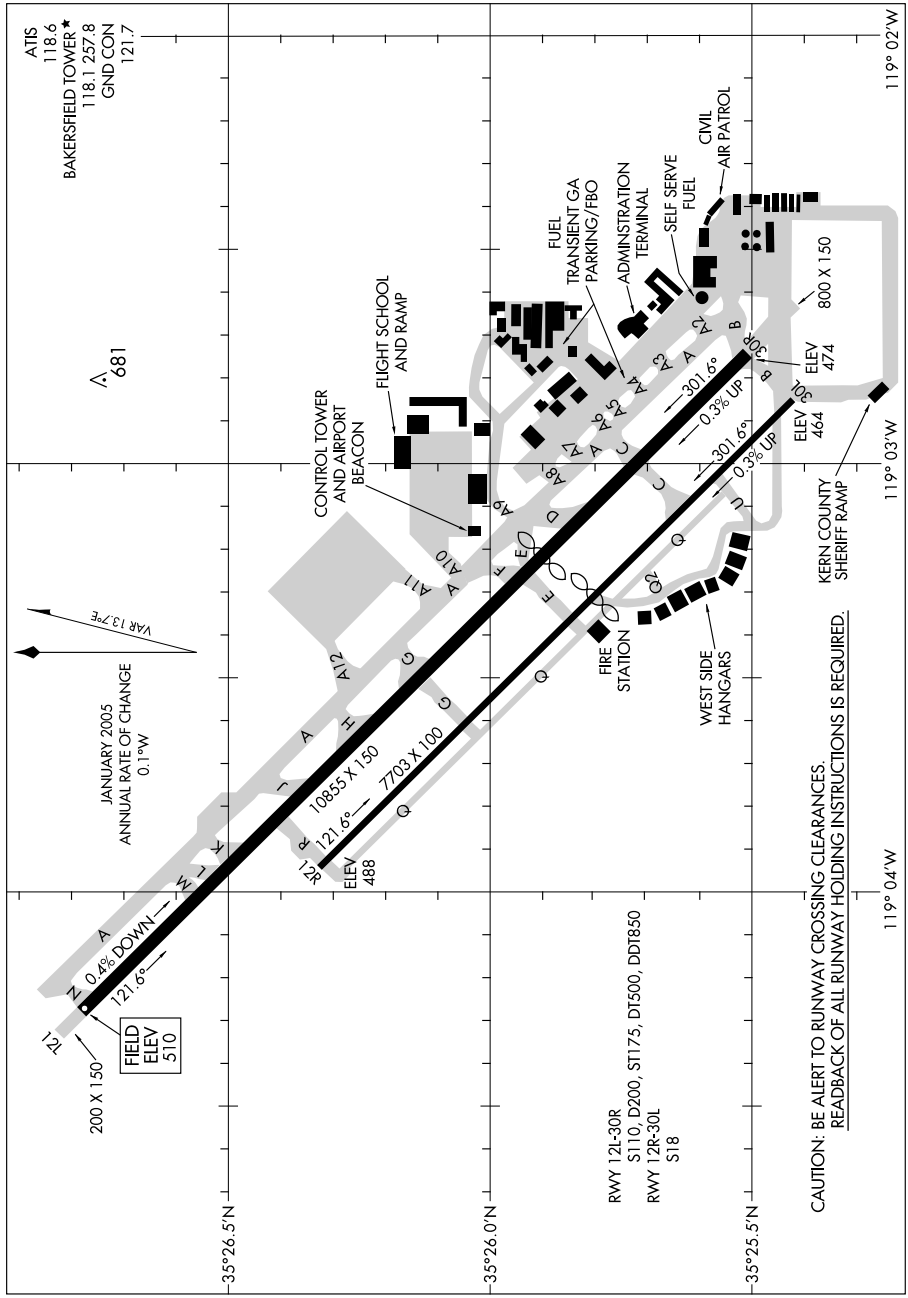
09127

AIRPORT DIAGRAM

BAKERSFIELD/MEADOWS FIELD (BFL)

BAKERSFIELD, CALIFORNIA

AL-36 (FAA)

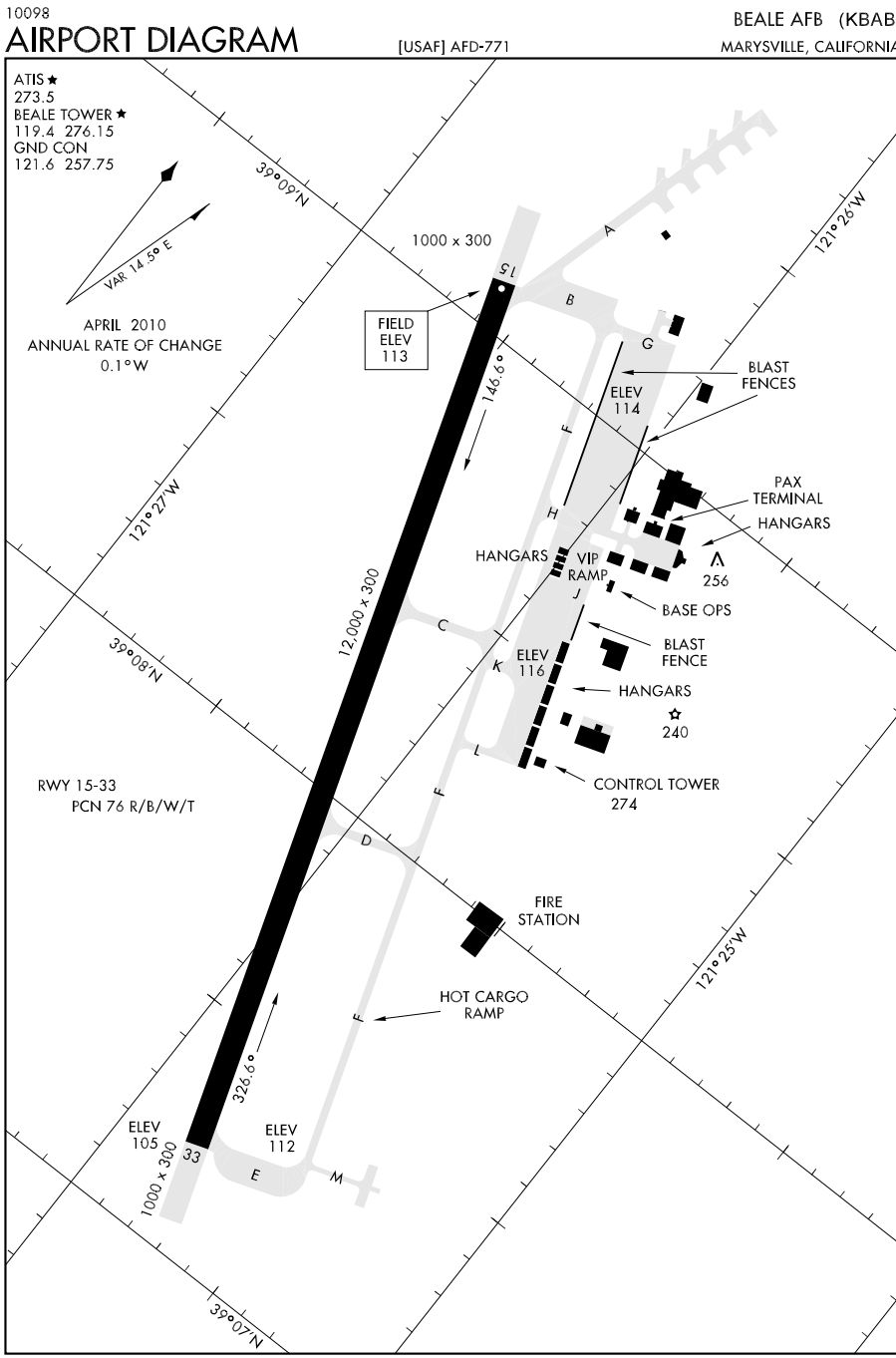


AIRPORT DIAGRAM

09127

BAKERSFIELD, CALIFORNIA

BAKERSFIELD/MEADOWS FIELD (BFL)


10098
AIRPORT DIAGRAM
[USAF] AFD-771
BEALE AFB (KBAB)
MARYSVILLE, CALIFORNIA
ATIS ★
273.5
BEALE TOWER ★
119.4 276.15
GND CON
121.6 257.75
VAR 14.5° E
APRIL 2010
ANNUAL RATE OF CHANGE
0.1°W
39°09'N
39°08'N
39°07'N
121°26'W
121°27'W
121°25'W
1000 x 300
15
33
FIELD
ELEV
113
146.6°
326.6°
12,000 x 300
1000 x 300
ELEV
114
ELEV
116
ELEV
105
ELEV
112
BLAST
FENCES
PAX
TERMINAL
HANGARS
HANGARS
VIP
RAMP
256
BASE OPS
BLAST
FENCE
HANGARS
240
CONTROL TOWER
274
FIRE
STATION
HOT CARGO
RAMP
RWY 15-33
PCN 76 R/B/W/T
A
B
C
D
E
F
G
H
J
K
L
M
AIRPORT DIAGRAM
MARYSVILLE, CALIFORNIA
BEALE AFB (KBAB)

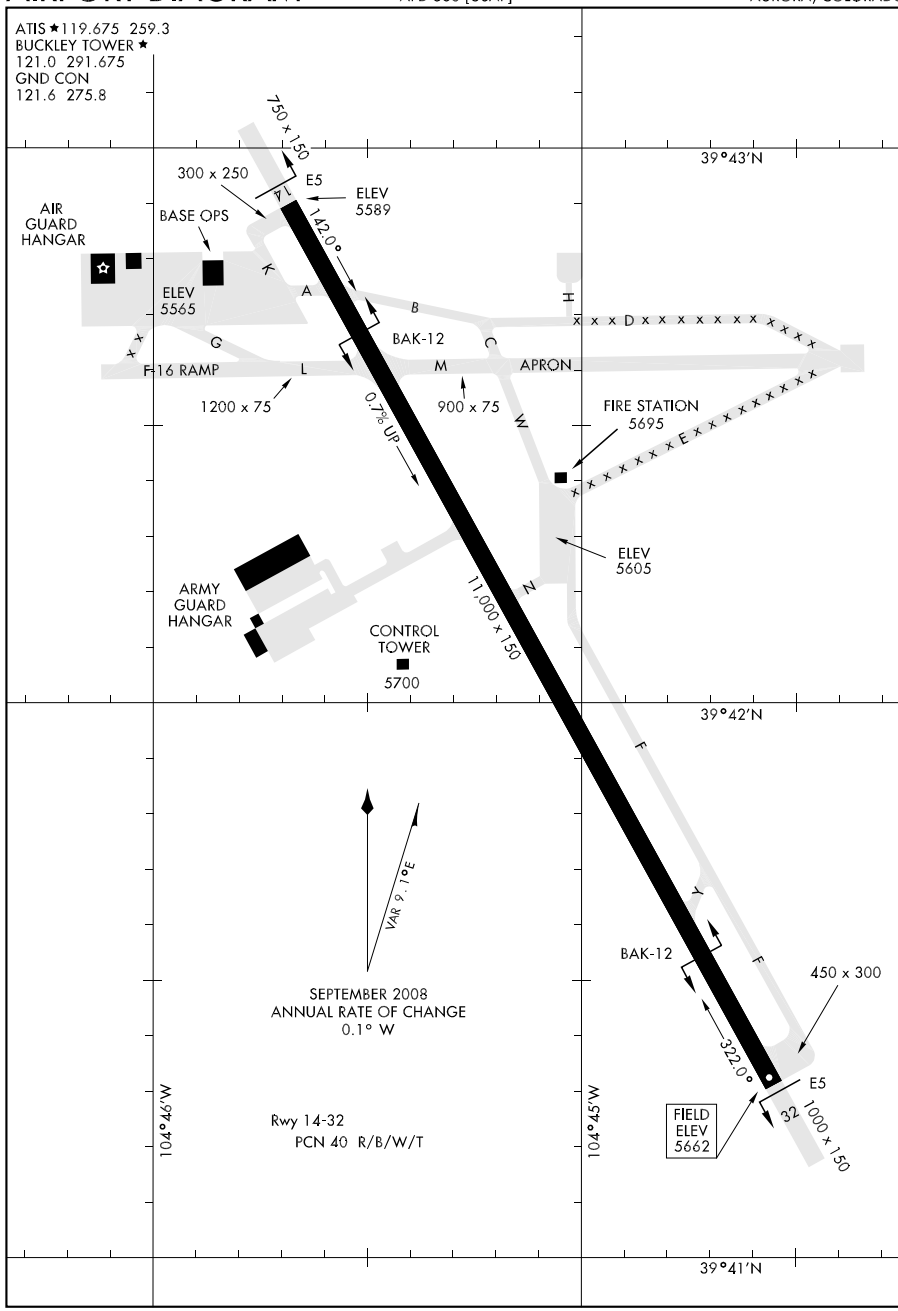
08269

AIRPORT DIAGRAM

AFD 538 [USAF]

BUCKLEY AFB (KBKF)

AURORA, COLORADO



AIRPORT DIAGRAM

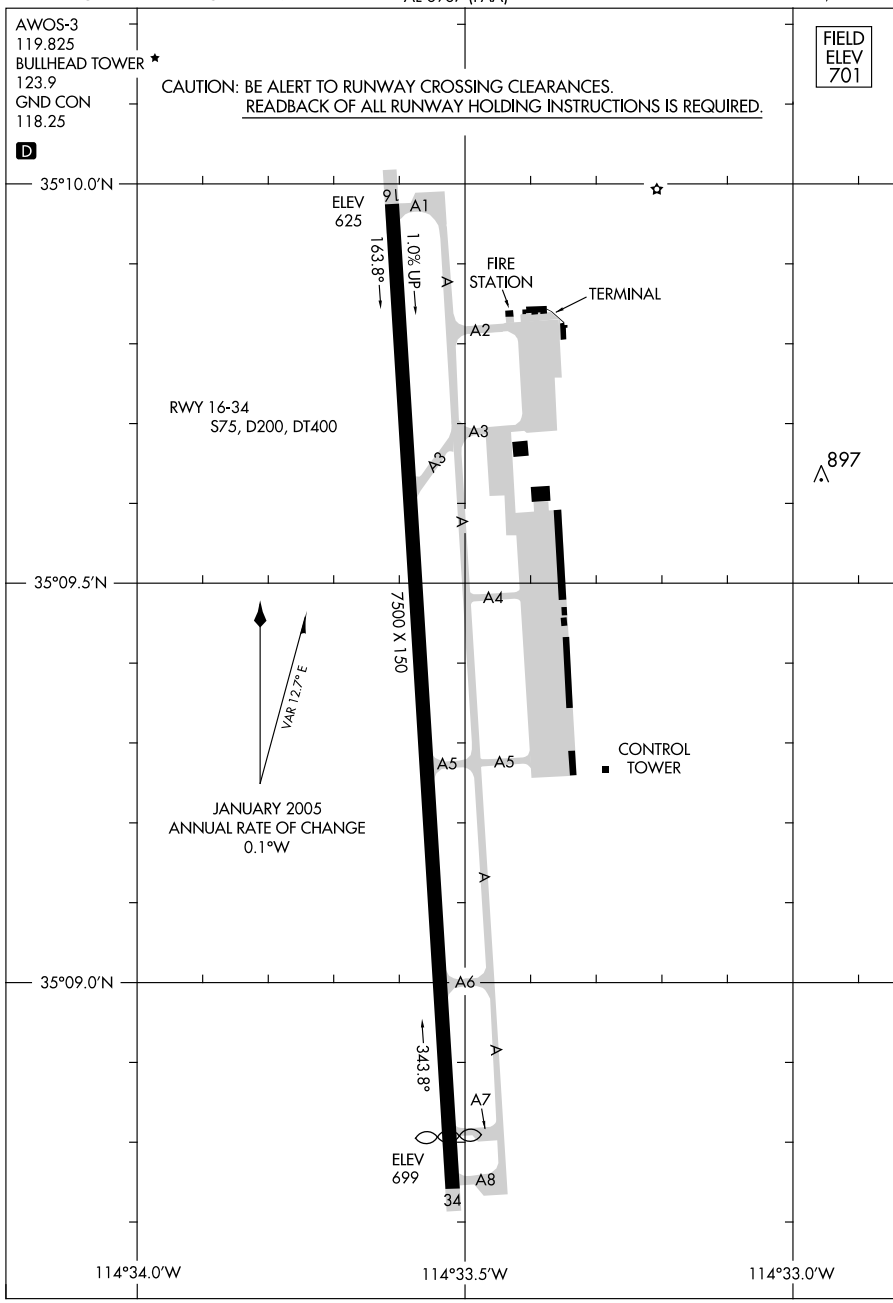
AURORA, COLORADO

BUCKLEY AFB (KBKF)

09295

AIRPORT DIAGRAM

BULLHEAD CITY/ LAUGHLIN/ BULLHEAD INTL (IFP)
AL-6967 (FAA)
BULLHEAD CITY, ARIZONA



AIRPORT DIAGRAM

09295

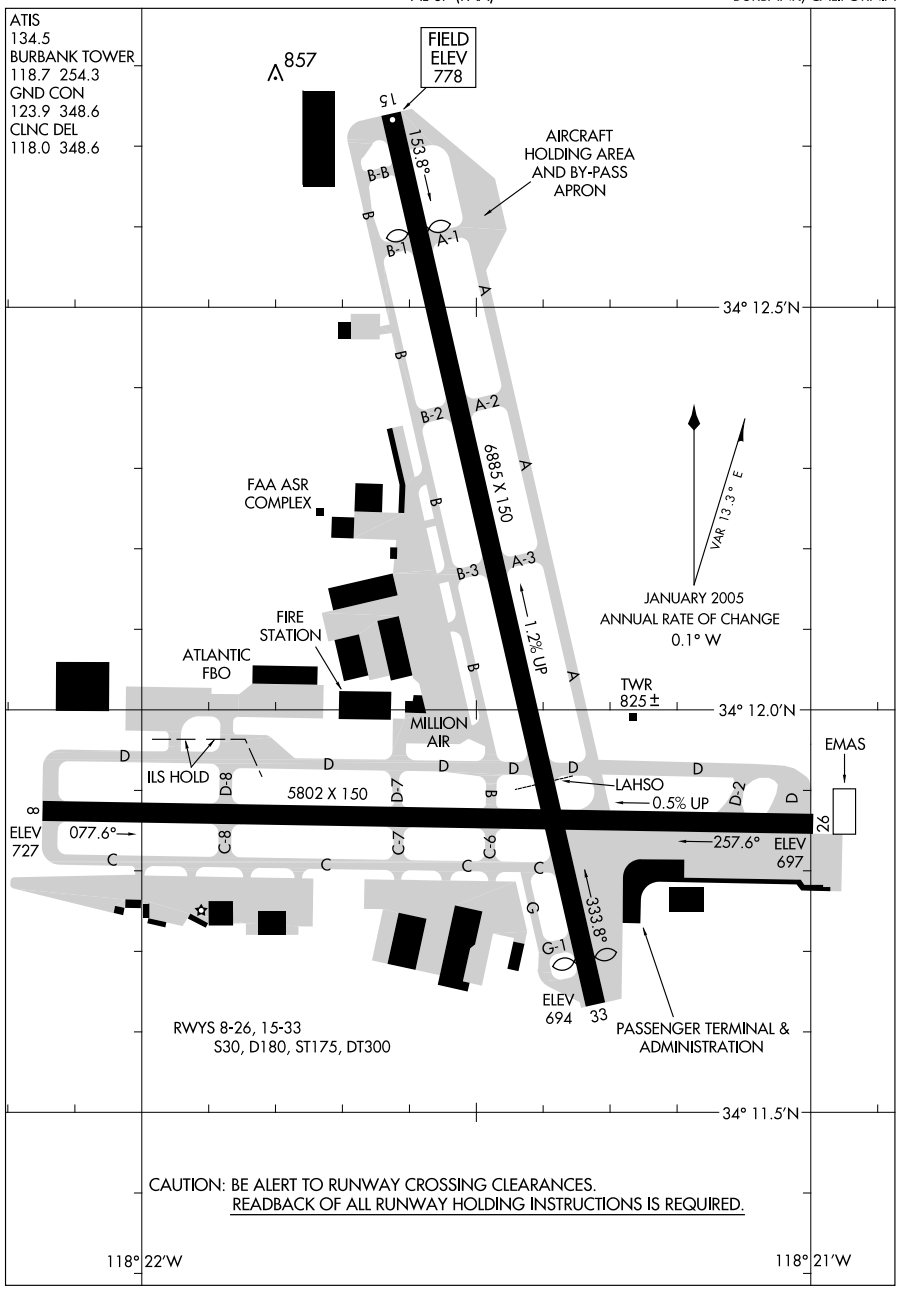
BULLHEAD CITY, ARIZONA
BULLHEAD CITY/ LAUGHLIN/ BULLHEAD INTL (IFP)

10042

AIRPORT DIAGRAM

AL-67 (FAA)

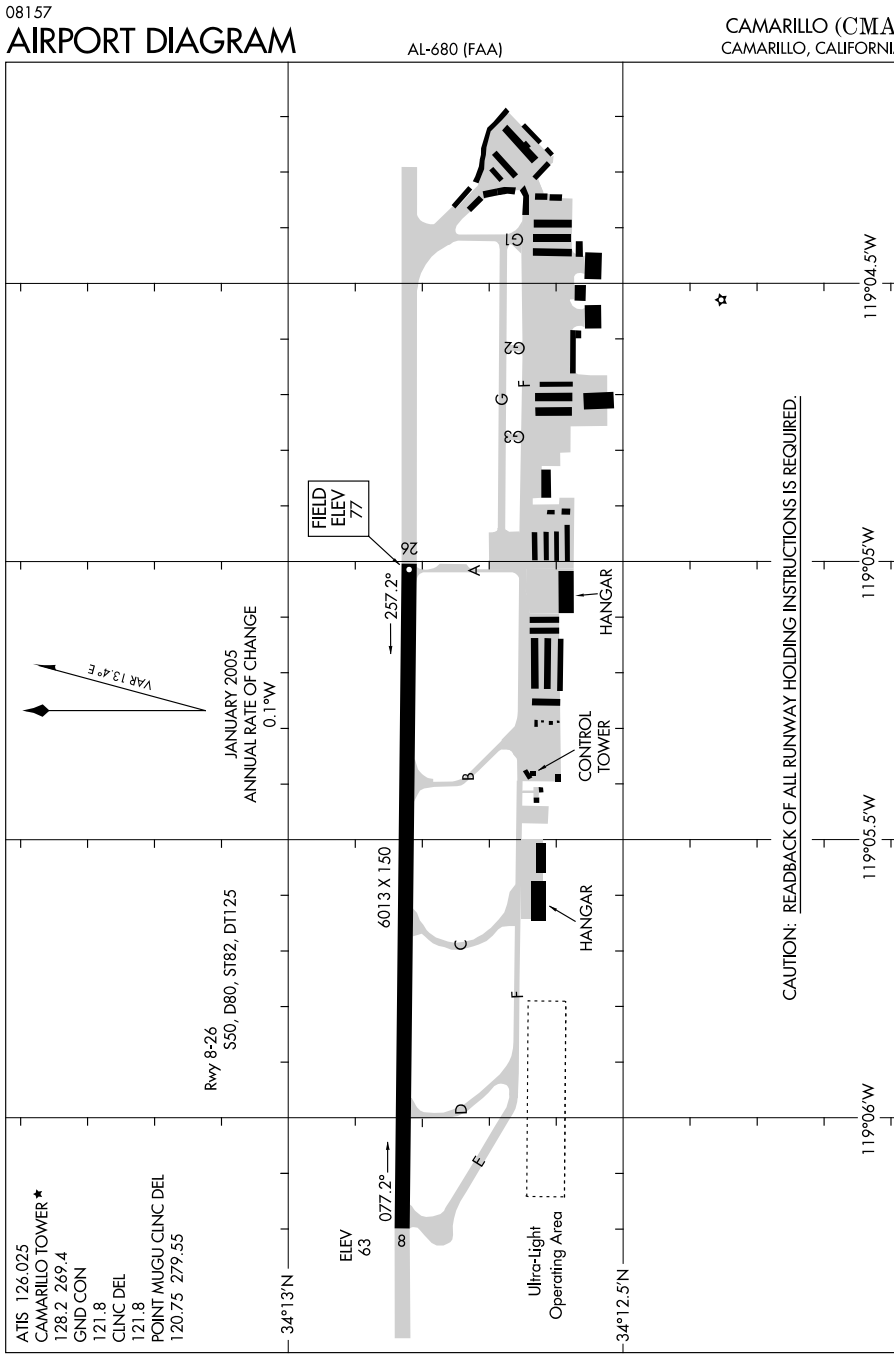
BURBANK/ BOB HOPE (BUR)
BURBANK, CALIFORNIA



AIRPORT DIAGRAM

10042

BURBANK, CALIFORNIA
BURBANK/ BOB HOPE (BUR)


08157
AIRPORT DIAGRAM
AL-680 (FAA)
CAMARILLO (CMA)
CAMARILLO, CALIFORNIA
ATIS 126.025
CAMARILLO TOWER ★
128.2 269.4
GND CON
121.8
CLNC DEL
121.8
POINT MUGU CLNC DEL
120.75 279.55
Rwy 8-26
S50, D80, ST82, DT125
6013 X 150
ELEV
63
077.2°
257.2°
FIELD
ELEV
77
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
VAR 13.4°E
CONTROL
TOWER
HANGAR
HANGAR
Ultra-Light
Operating Area
CAUTION: READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
34°13'N
34°12.5'N
119°06'W
119°05.5'W
119°05'W
119°04.5'W
AIRPORT DIAGRAM
08157
CAMARILLO, CALIFORNIA
CAMARILLO (CMA)

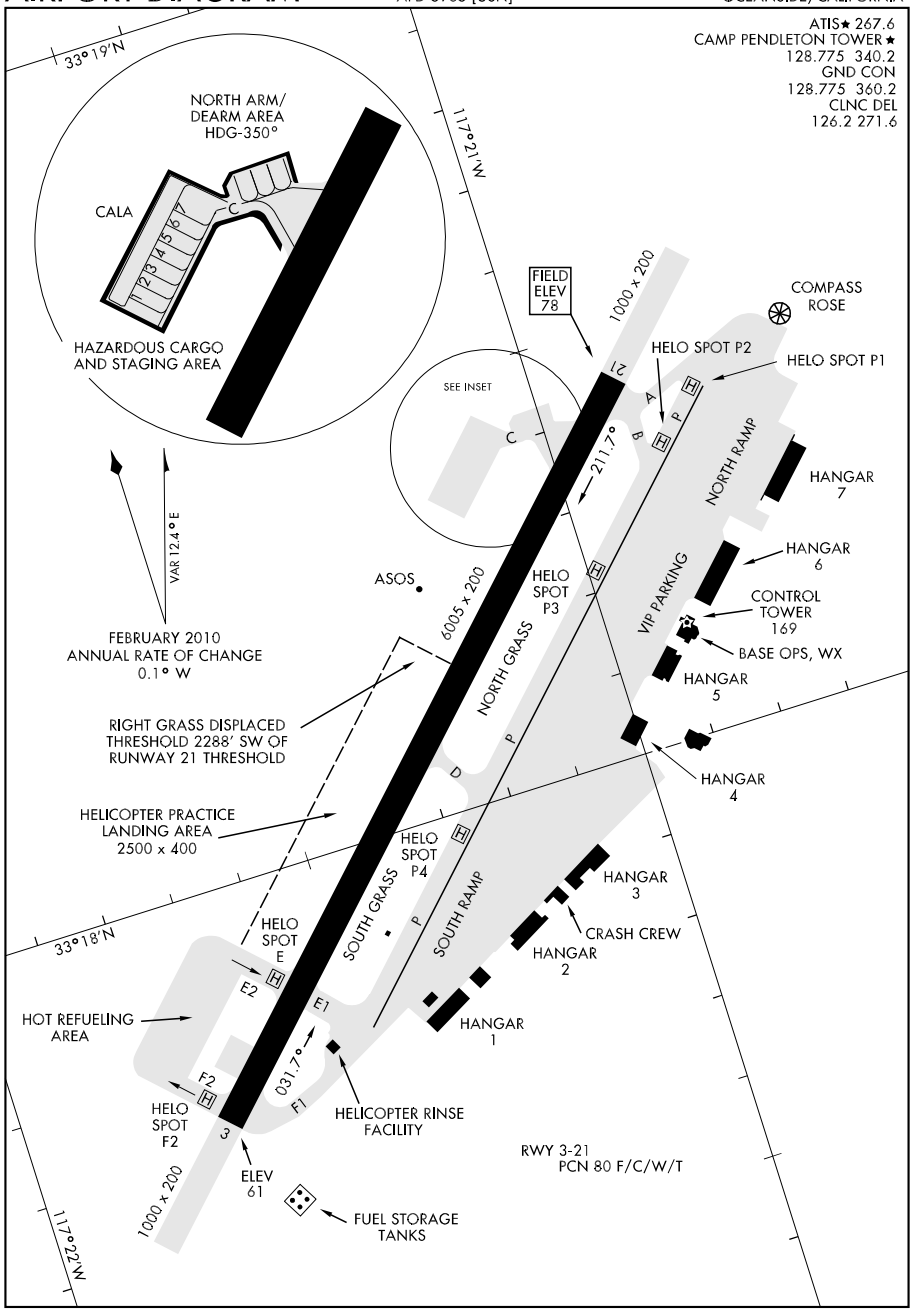
10014

AIRPORT DIAGRAM

CAMP PENDLETON MCAS (MUNN FIELD) (KNFG)

AFD-5985 [USN]

OCEANSIDE, CALIFORNIA



AIRPORT DIAGRAM

OCEANSIDE, CALIFORNIA

CAMP PENDLETON MCAS (MUNN FIELD) (KNFG)

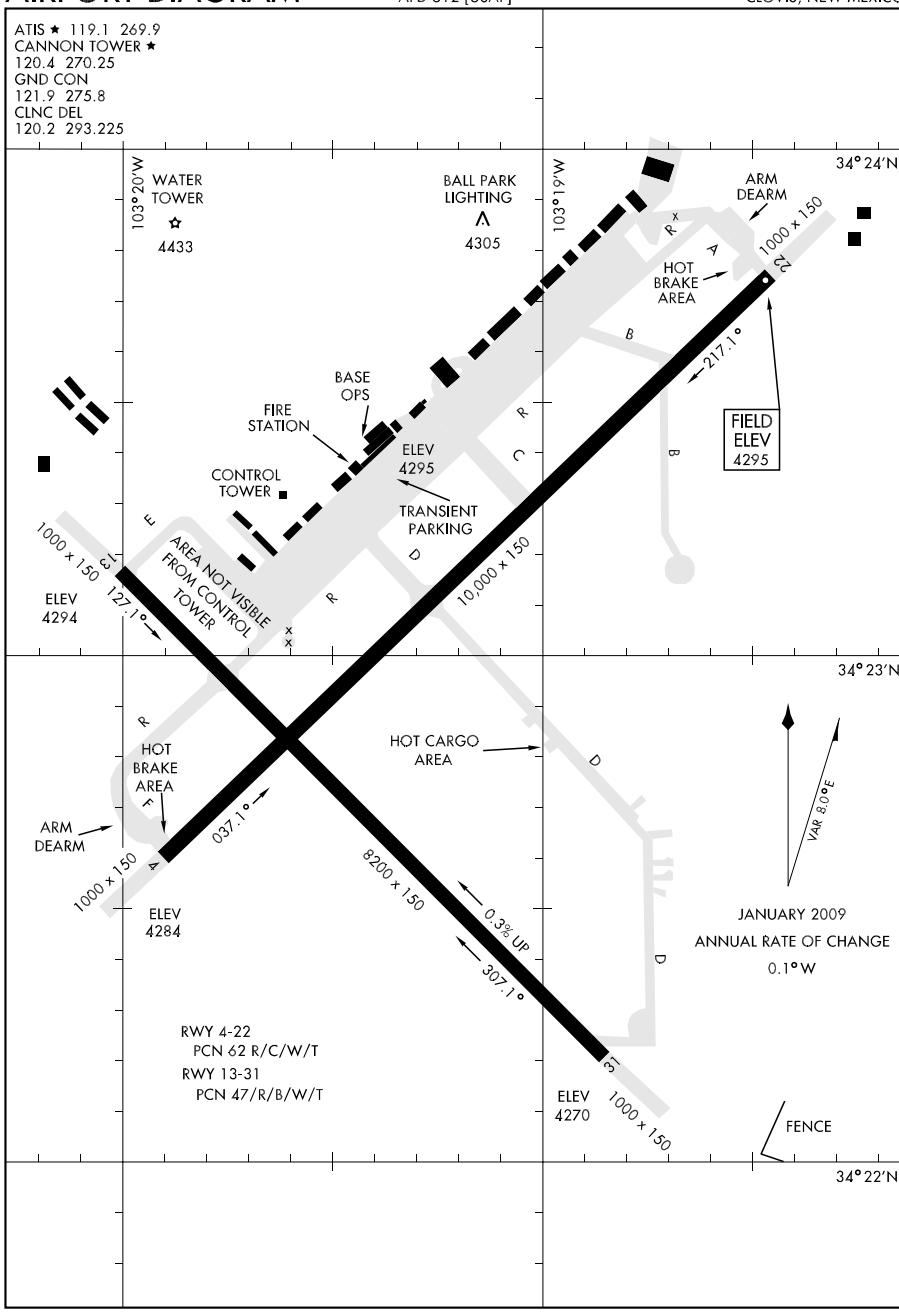
09015

AIRPORT DIAGRAM

AFD-512 [USAF]

CANNON AFB (KCVS)

CLOVIS, NEW MEXICO

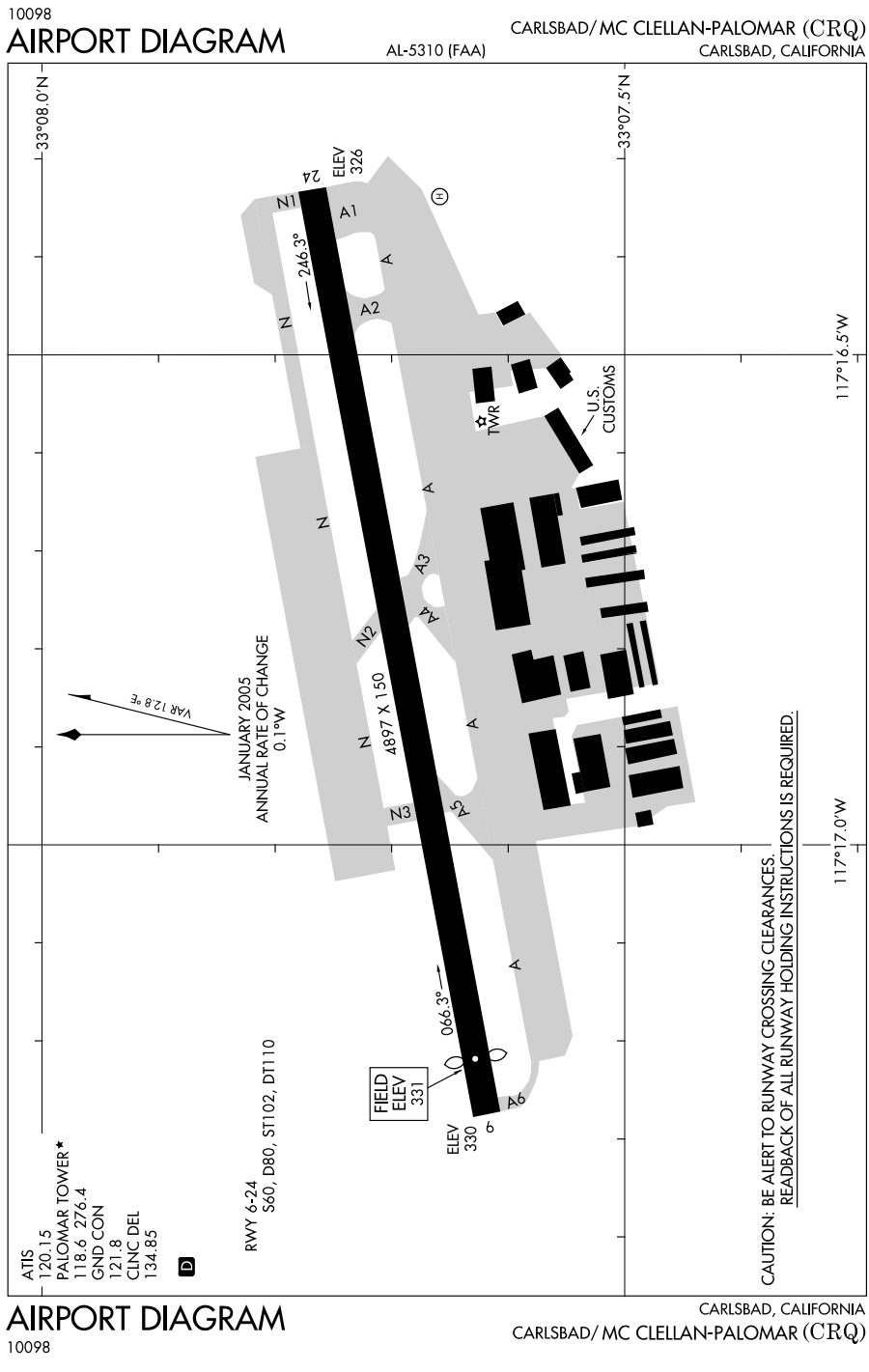


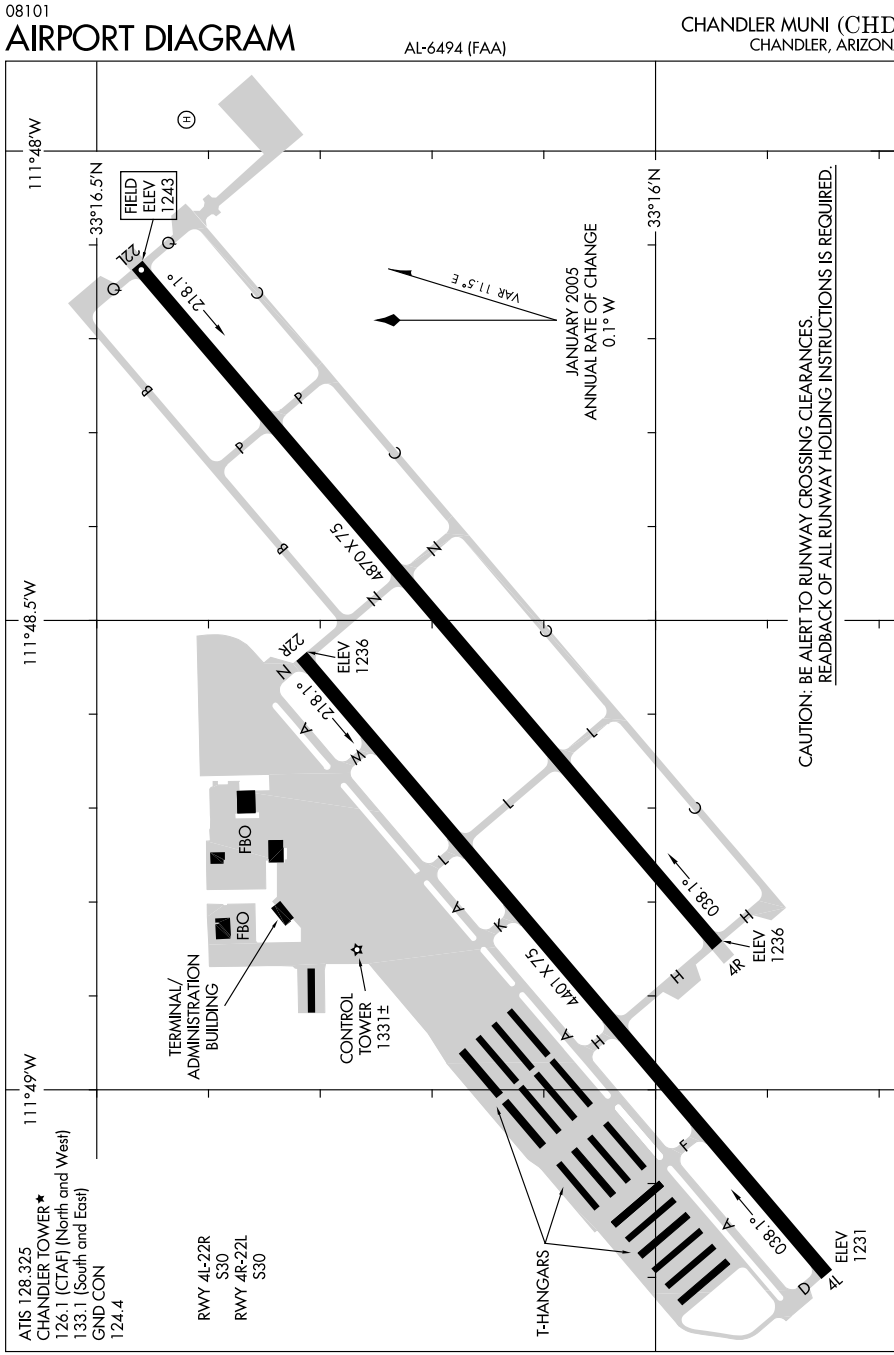
AIRPORT DIAGRAM

WGS-84 DATUM

CLOVIS, NEW MEXICO

CANNON AFB (KCVS)


10098
AIRPORT DIAGRAM
CARLSBAD/ MC CLELLAN-PALOMAR (CRQ)
AL-5310 (FAA)
CARLSBAD, CALIFORNIA
33°08.0'N
33°07.5'N
117°16.5'W
117°17.0'W
ELEV 326
24
N1
A1
246.3°
A2
TWR
U.S. CUSTOMS
N2
4897 X 150
N3
A3
A4
A5
A6
066.3°
FIELD ELEV 331
ELEV 330
6
VAR 12.8°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
ATIS 120.15
PALOMAR TOWER* 118.6 276.4
GND CON 121.8
CLNC DEL 134.85
D
RWY 6-24
S60, D80, ST102, DT110
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
AIRPORT DIAGRAM
10098
CARLSBAD, CALIFORNIA
CARLSBAD/ MC CLELLAN-PALOMAR (CRQ)

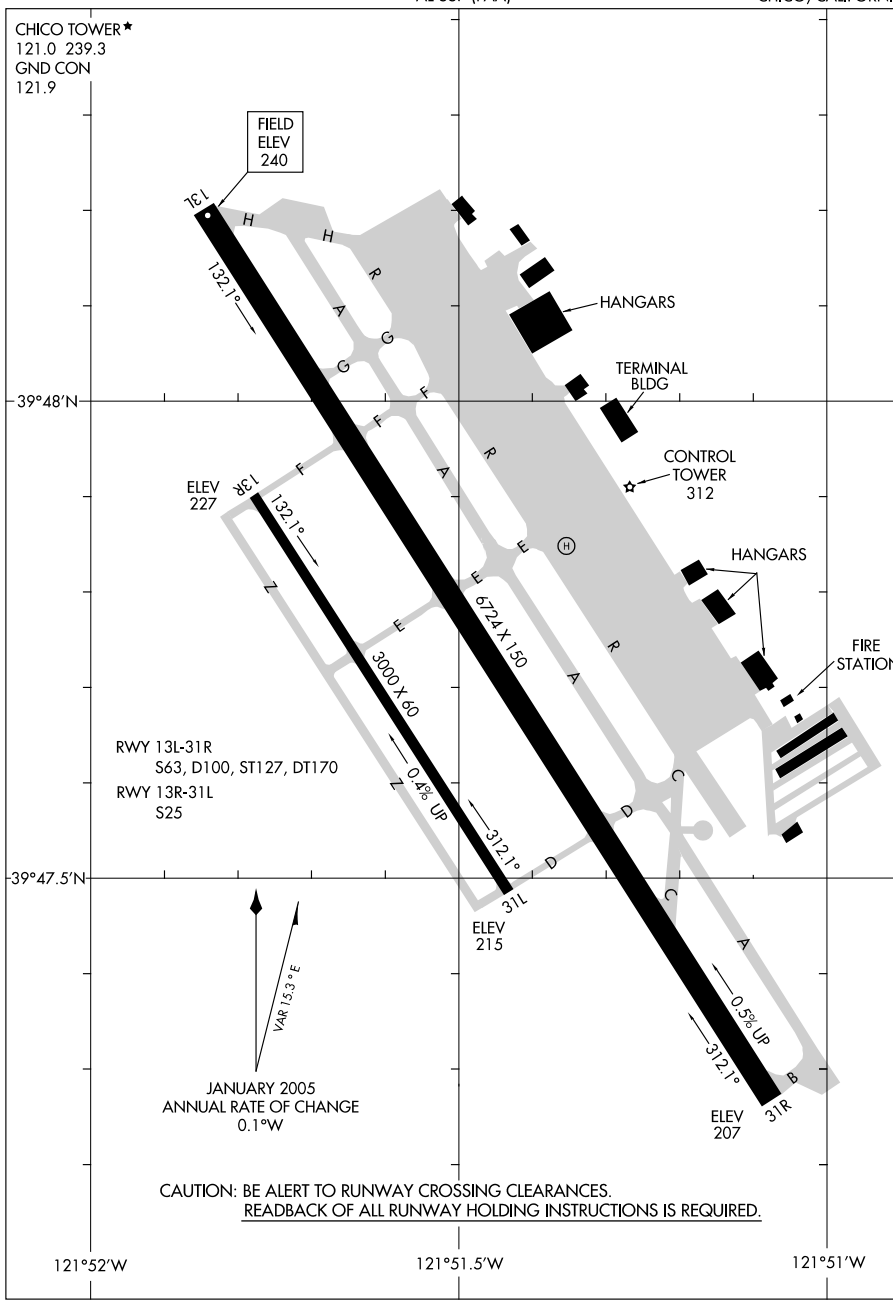

08101
AIRPORT DIAGRAM
AL-6494 (FAA)
CHANDLER MUNI (CHD)
CHANDLER, ARIZONA
111°48'W
33°16.5'N
111°48.5'W
33°16'N
111°49'W
FIELD ELEV 1243
22
218.1°
4870 X 75
22R
218.1°
ELEV 1236
4401 X 75
038.1°
4R
ELEV 1236
038.1°
4L
ELEV 1231
VAR 11.5°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1° W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
TERMINAL/
ADMINISTRATION
BUILDING
FBO
FBO
CONTROL
TOWER
1331±
T-HANGARS
ATIS 128.325
CHANDLER TOWER★
126.1 (CTAF) (North and West)
133.1 (South and East)
GND CON
124.4
RWY 4L-22R
S30
RWY 4R-22L
S30
AIRPORT DIAGRAM
08101
CHANDLER, ARIZONA
CHANDLER MUNI (CHD)

08157

AIRPORT DIAGRAM

CHICO MUNI (CIC)
CHICO, CALIFORNIA

AL-557 (FAA)



AIRPORT DIAGRAM

CHICO, CALIFORNIA
CHICO MUNI (CIC)

08157

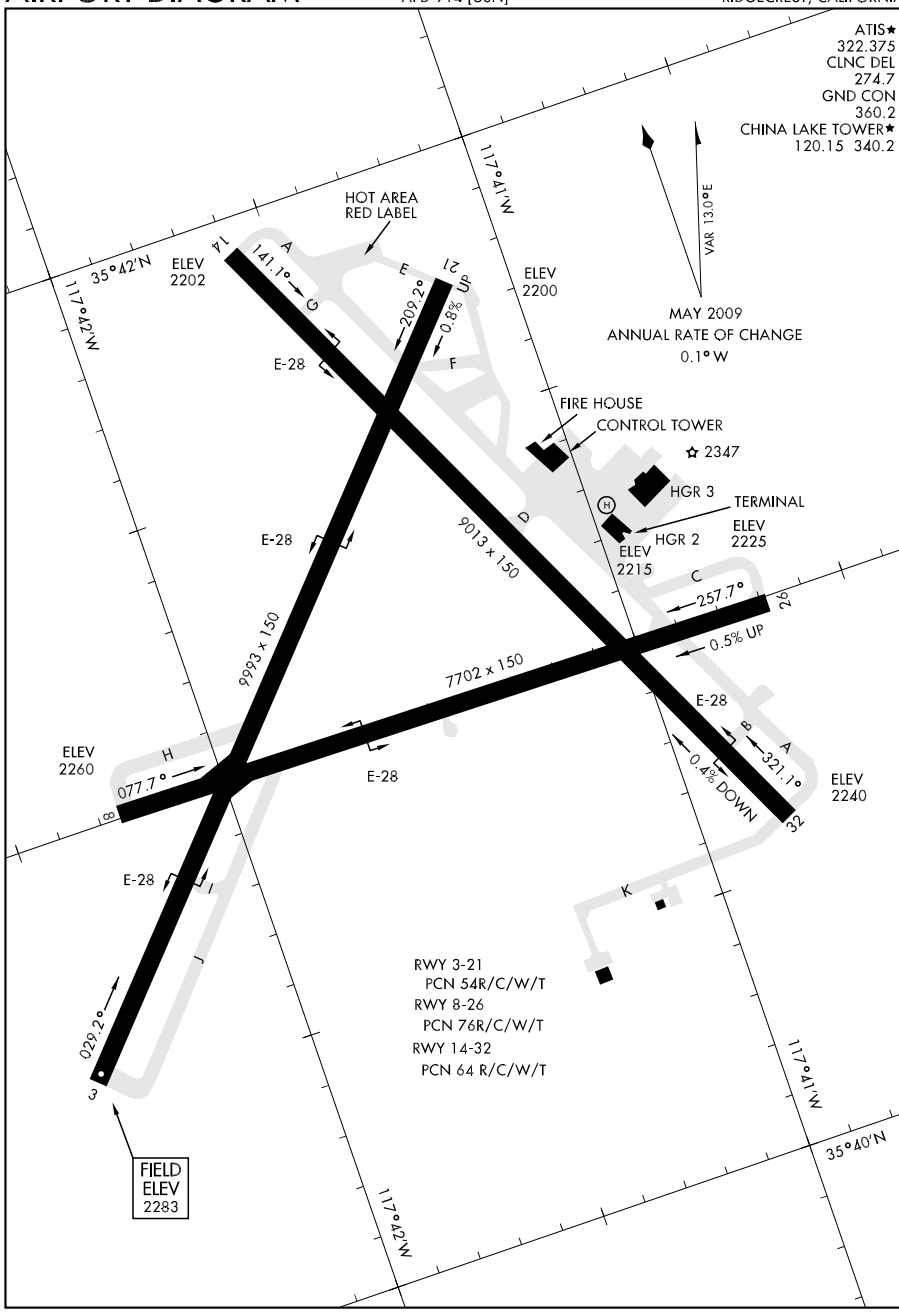
09127

AIRPORT DIAGRAM

CHINA LAKE NAWS (ARMITAGE FIELD) (KNID)

AFD-914 [USN]

RIDGECREST, CALIFORNIA



AIRPORT DIAGRAM

RIDGECREST, CALIFORNIA

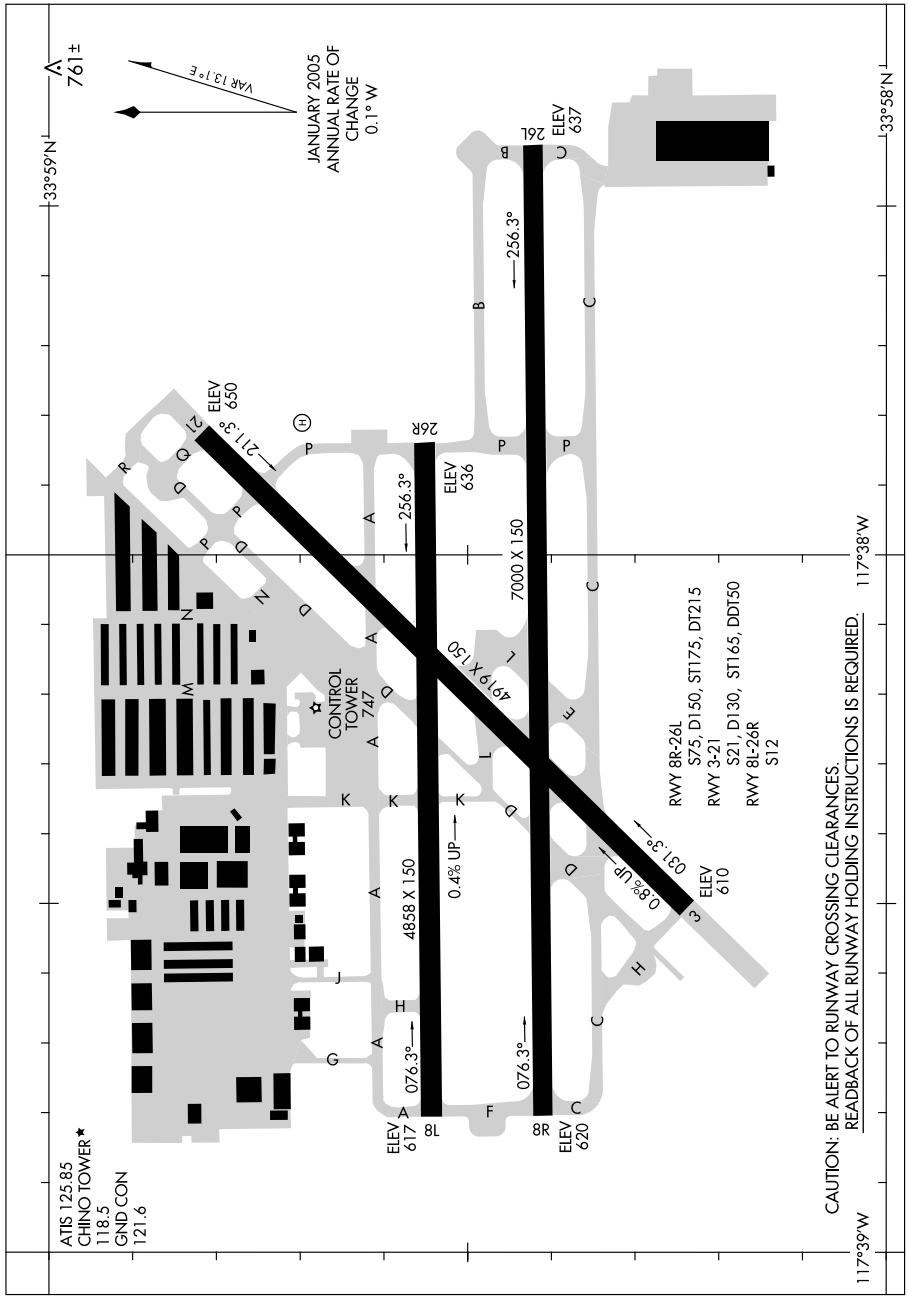
CHINA LAKE NAWS (ARMITAGE FIELD) (KNID)

07354

AIRPORT DIAGRAM

AL-5599 (FAA)

CHINO (CNO)
CHINO, CALIFORNIA

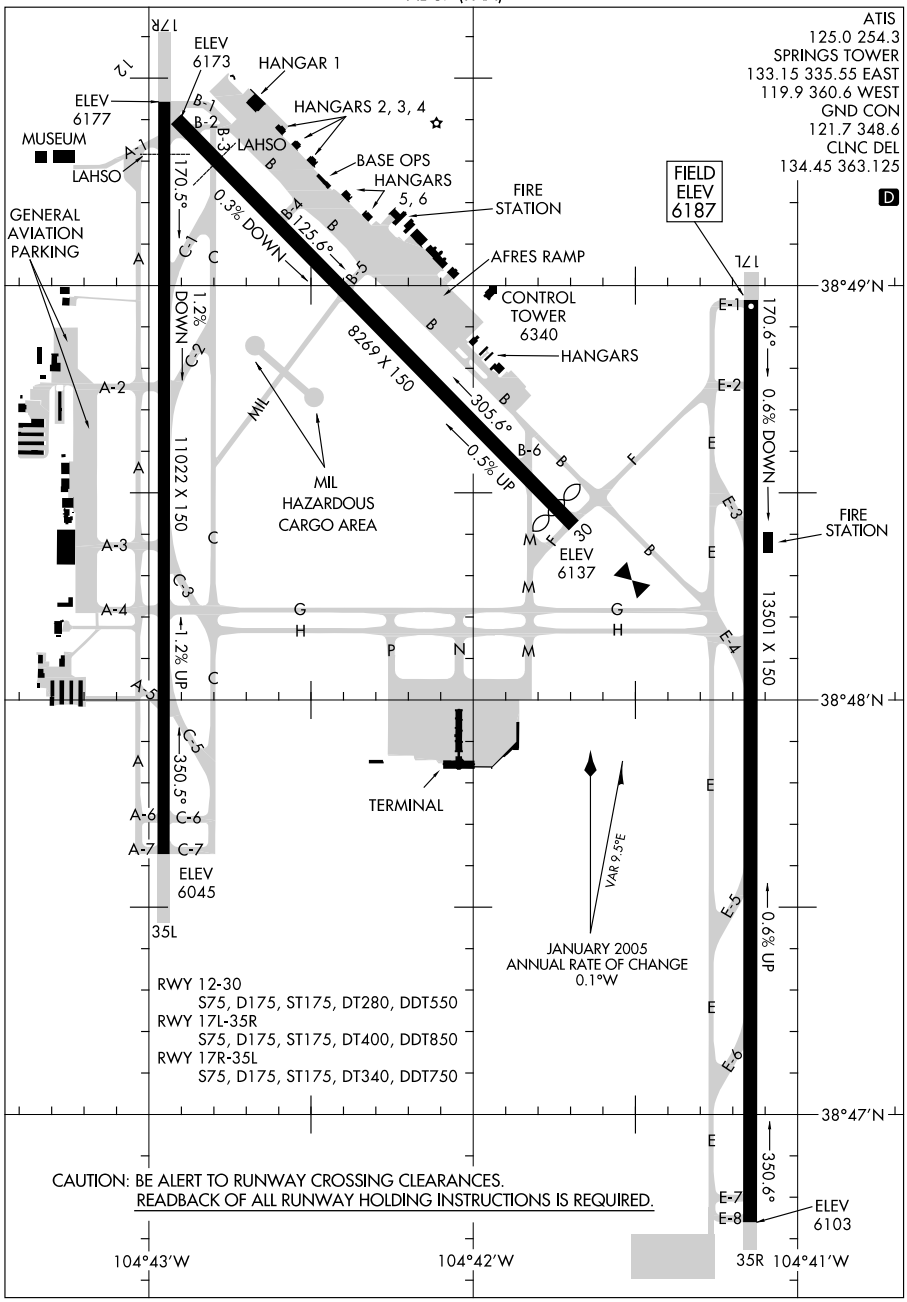


AIRPORT DIAGRAM
07354
CHINO, CALIFORNIA
CHINO (CNO)

09351

AIRPORT DIAGRAM

COLORADO SPRINGS/CITY OF COLORADO SPRINGS MUNI (COS)
AL-87 (FAA)
COLORADO SPRINGS, COLORADO



AIRPORT DIAGRAM

COLORADO SPRINGS, COLORADO
COLORADO SPRINGS/ CITY OF COLORADO SPRINGS MUNI (COS)

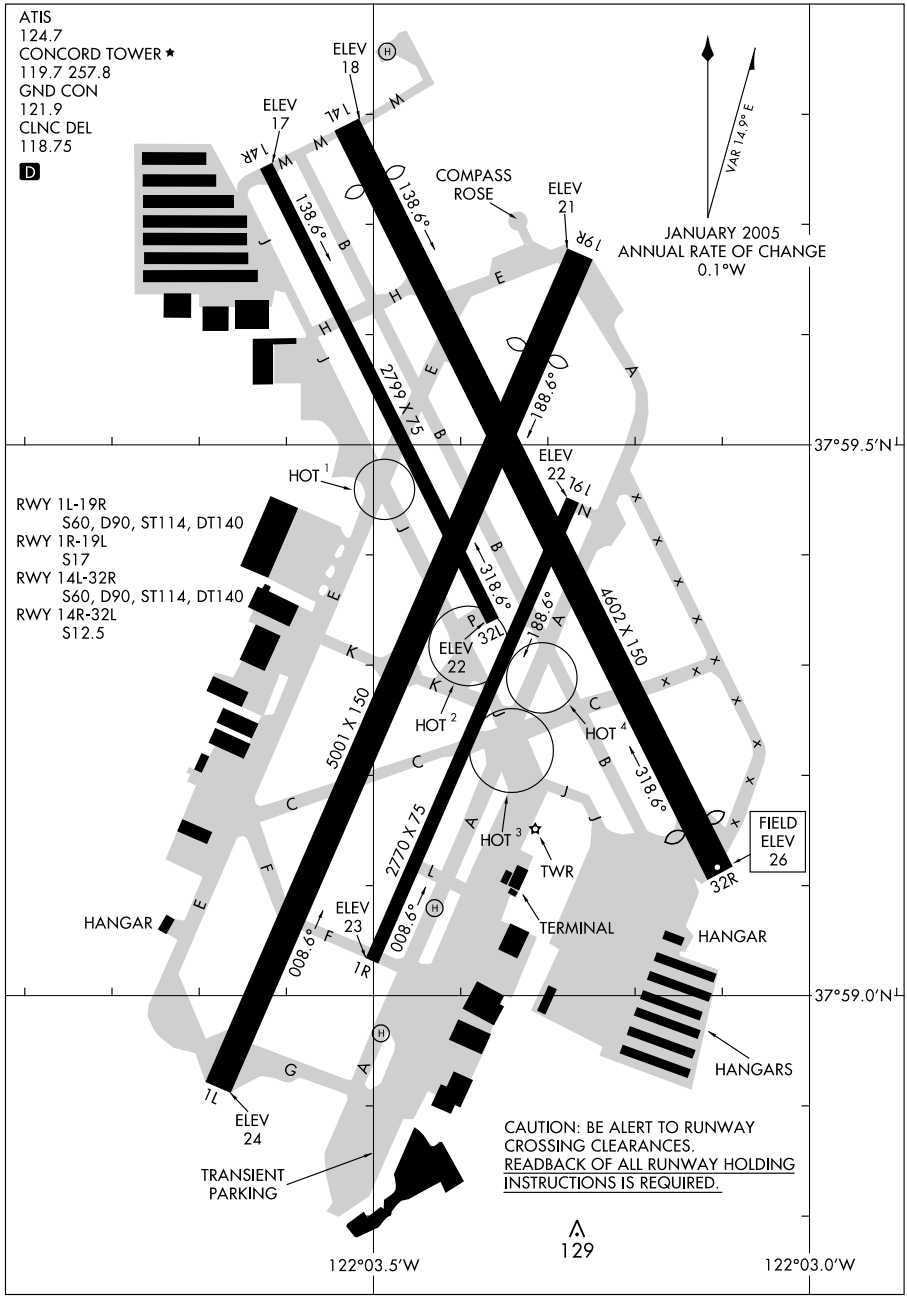
09351

10042

AIRPORT DIAGRAM

CONCORD/BUCHANAN FIELD (CCR)
CONCORD, CALIFORNIA

AL-5320 (FAA)



AIRPORT DIAGRAM

10042

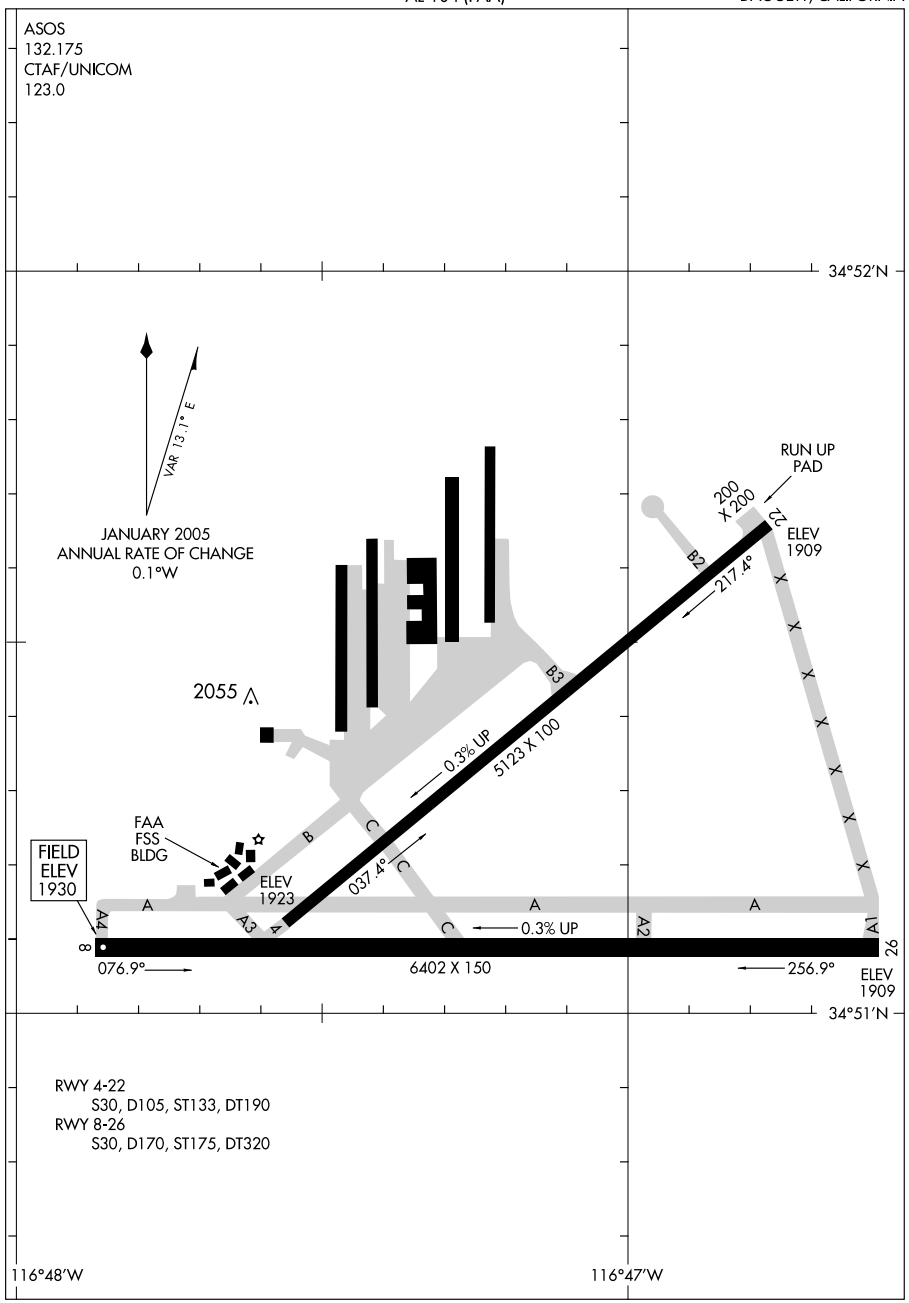
CONCORD, CALIFORNIA
CONCORD/BUCHANAN FIELD (CCR)

09239

AIRPORT DIAGRAM

AL-104 (FAA)

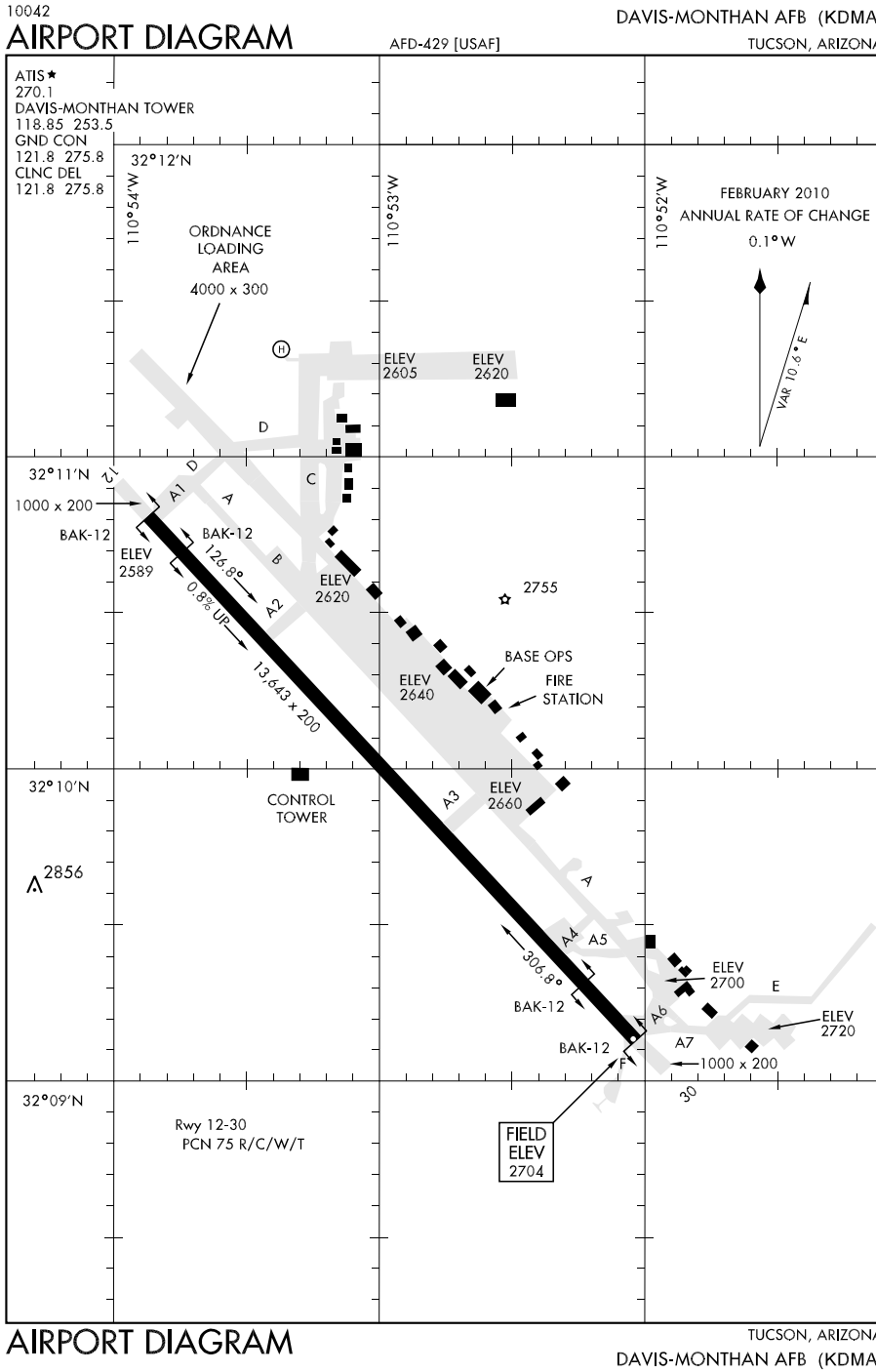
DAGGETT/BARSTOW-DAGGETT (DAG)
DAGGETT, CALIFORNIA

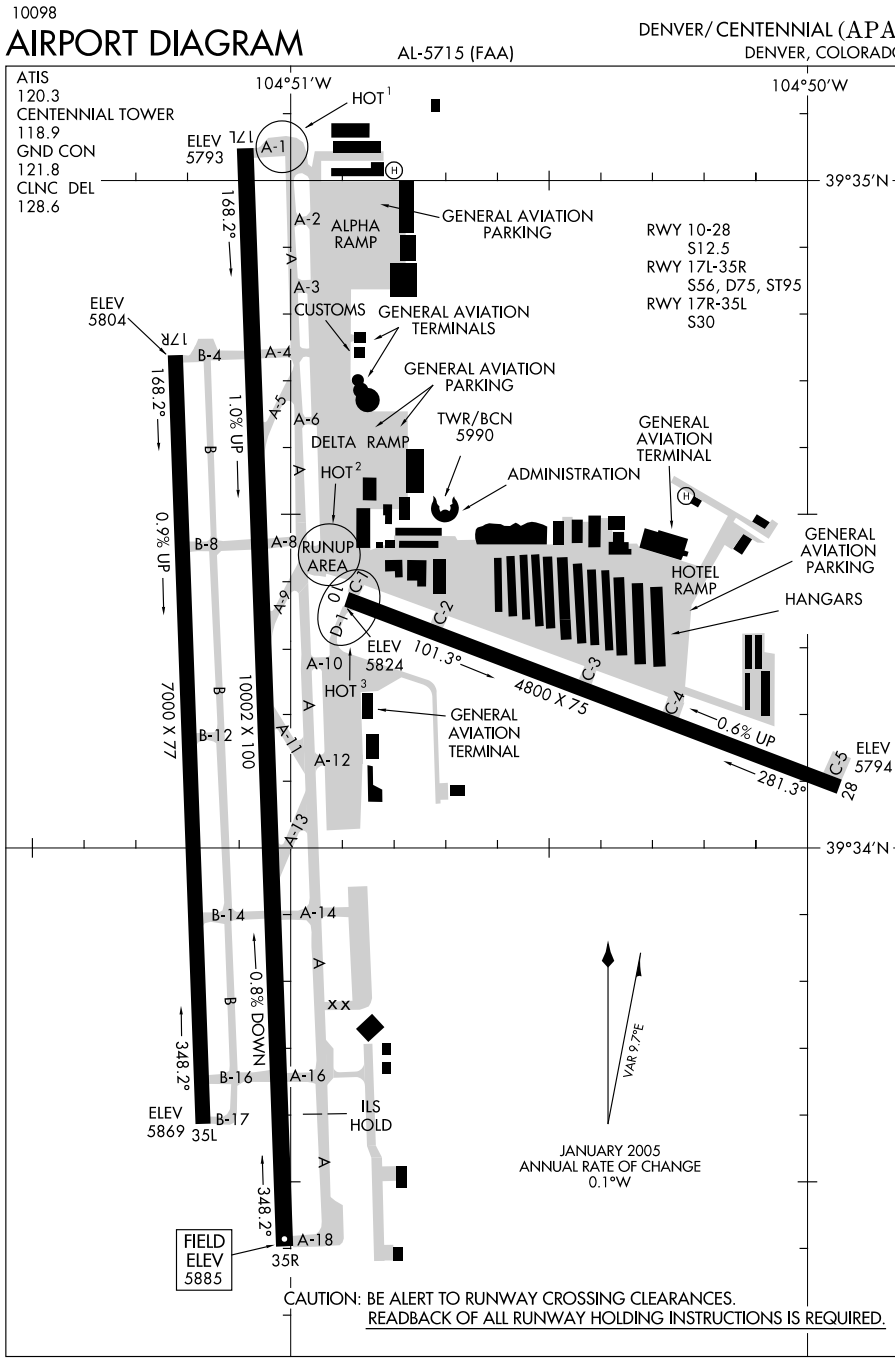


AIRPORT DIAGRAM

09239

DAGGETT, CALIFORNIA
DAGGETT/BARSTOW-DAGGETT (DAG)


10042
AIRPORT DIAGRAM
DAVIS-MONTHAN AFB (KDMA)
AFD-429 [USAF]
TUCSON, ARIZONA
ATIS ★
270.1
DAVIS-MONTHAN TOWER
118.85 253.5
GND CON
121.8 275.8
CLNC DEL
121.8 275.8
32°12'N
110°54'W
110°53'W
110°52'W
ORDNANCE
LOADING
AREA
4000 x 300
ELEV
2605
ELEV
2620
FEBRUARY 2010
ANNUAL RATE OF CHANGE
0.1°W
VAR 10.6°E
32°11'N
1000 x 200
BAK-12
ELEV
2589
BAK-12
126.8°
0.8% UP
13,643 x 200
ELEV
2620
2755
BASE OPS
ELEV
2640
FIRE
STATION
32°10'N
CONTROL
TOWER
ELEV
2660
2856
306.8°
BAK-12
ELEV
2700
ELEV
2720
BAK-12
1000 x 200
32°09'N
Rwy 12-30
PCN 75 R/C/W/T
FIELD
ELEV
2704
AIRPORT DIAGRAM
TUCSON, ARIZONA
DAVIS-MONTHAN AFB (KDMA)

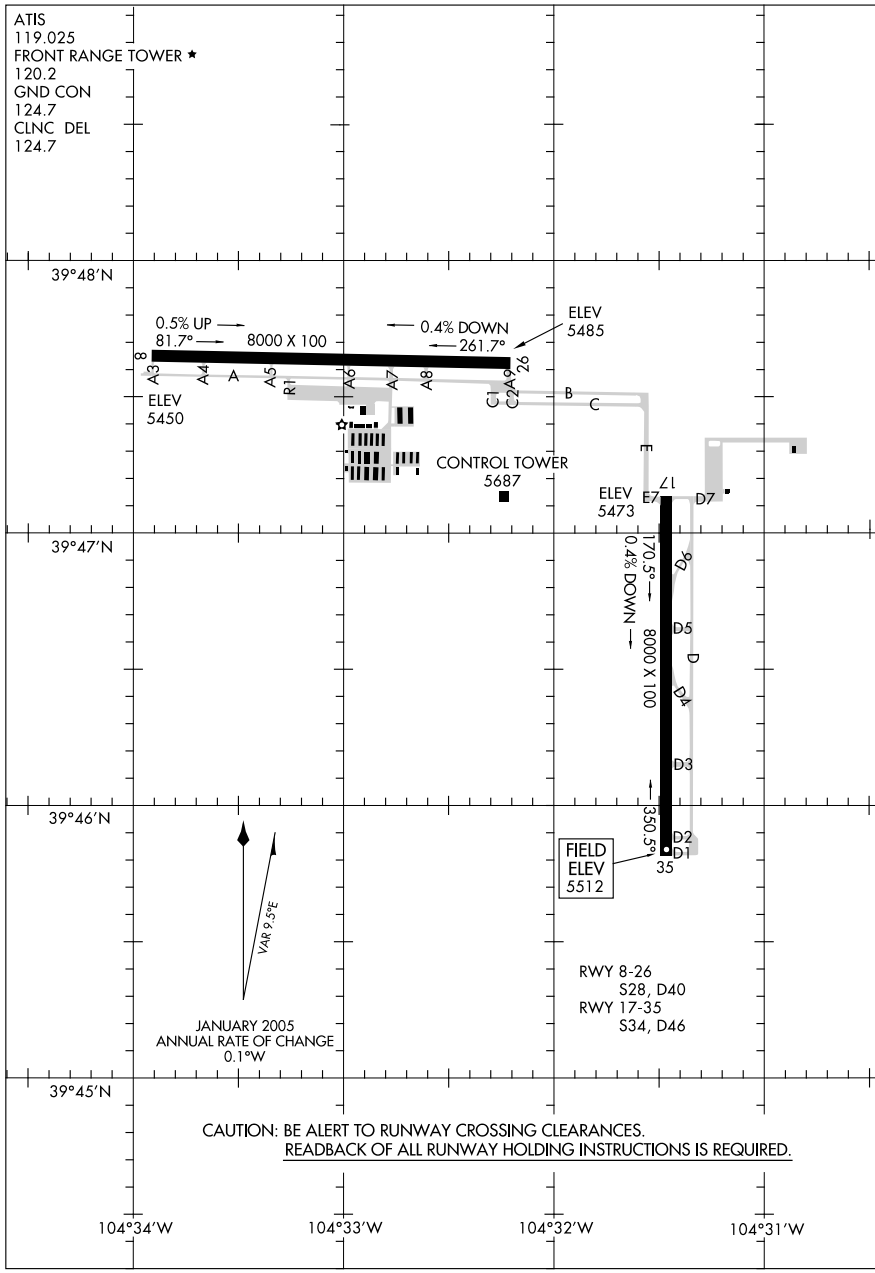

10098
AIRPORT DIAGRAM
AL-5715 (FAA)
DENVER/ CENTENNIAL (APA)
DENVER, COLORADO
ATIS
120.3
CENTENNIAL TOWER
118.9
GND CON
121.8
CLNC DEL
128.6
104°51'W
104°50'W
39°35'N
39°34'N
HOT 1
ELEV 5793
17L
A-1
168.2°
A-2
ALPHA RAMP
GENERAL AVIATION PARKING
RWY 10-28
S12.5
RWY 17L-35R
S56, D75, ST95
RWY 17R-35L
S30
ELEV 5804
17R
B-4
A-4
A-3
CUSTOMS
GENERAL AVIATION TERMINALS
GENERAL AVIATION PARKING
168.2°
1.0% UP
A-5
A-6
DELTA RAMP
TWR/BCN 5990
GENERAL AVIATION TERMINAL
HOT 2
ADMINISTRATION
0.9% UP
B-8
A-8
RUNUP AREA
GENERAL AVIATION PARKING
HOTEL RAMP
HANGARS
D-1
C-1
C-2
C-3
C-4
C-5
A-9
A-10
ELEV 5824
101.3°
4800 X 75
0.6% UP
281.3°
ELEV 5794
HOT 3
GENERAL AVIATION TERMINAL
7000 X 77
10002 X 100
B-12
A-11
A-12
A-13
B-14
A-14
0.8% DOWN
xx
348.2°
B-16
A-16
ELEV 5869
B-17
35L
ILS HOLD
VAR 9.7°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
348.2°
FIELD ELEV 5885
A-18
35R
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
AIRPORT DIAGRAM
10098
DENVER, COLORADO
DENVER/CENTENNIAL (APA)

09015

AIRPORT DIAGRAM

AL-6851 (FAA)

DENVER/FRONT RANGE (FTG)
DENVER, COLORADO



AIRPORT DIAGRAM

DENVER/FRONT RANGE (FTG)
DENVER, COLORADO

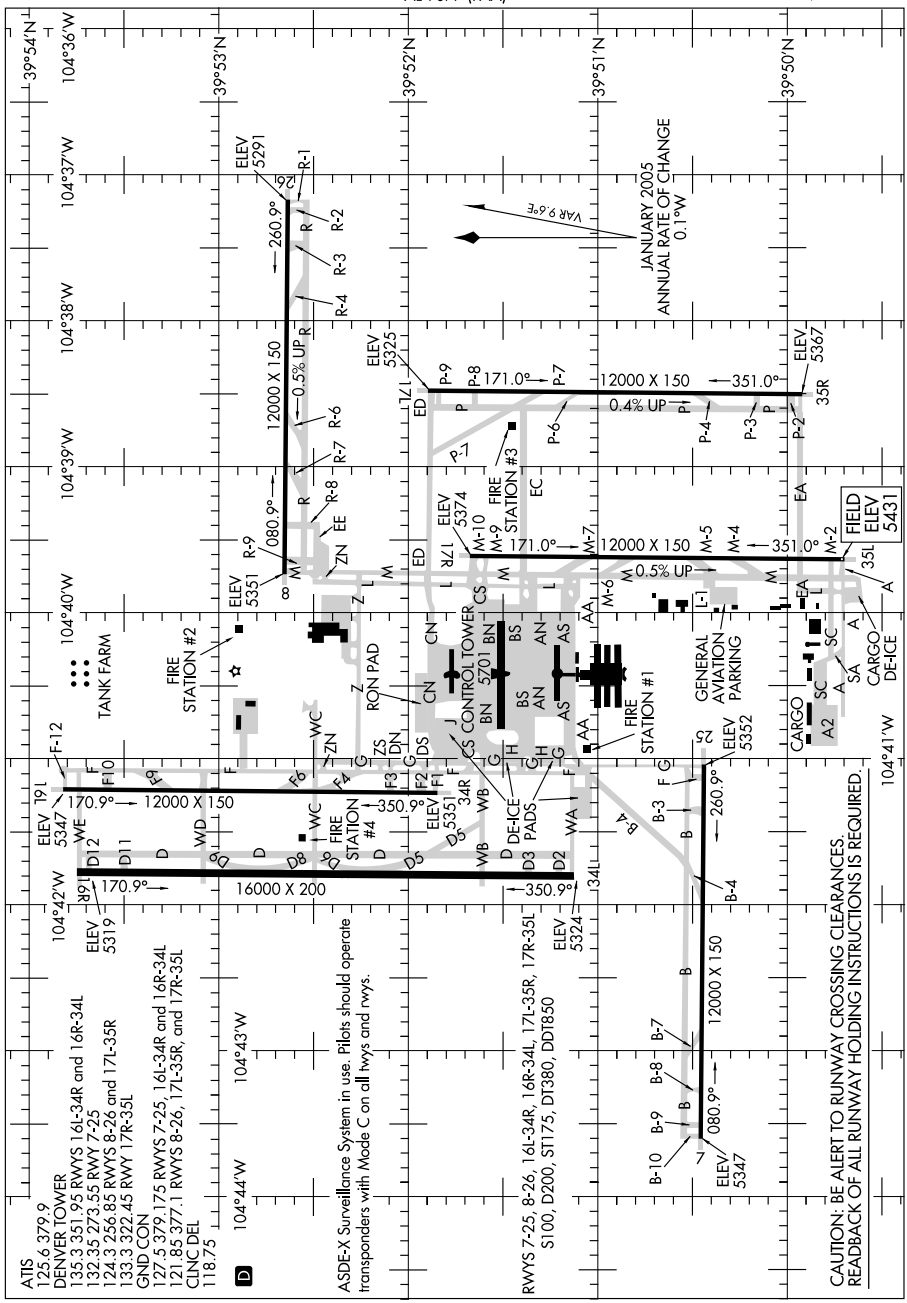
09015

09351

AIRPORT DIAGRAM

DENVER INTL (DEN)
DENVER, COLORADO

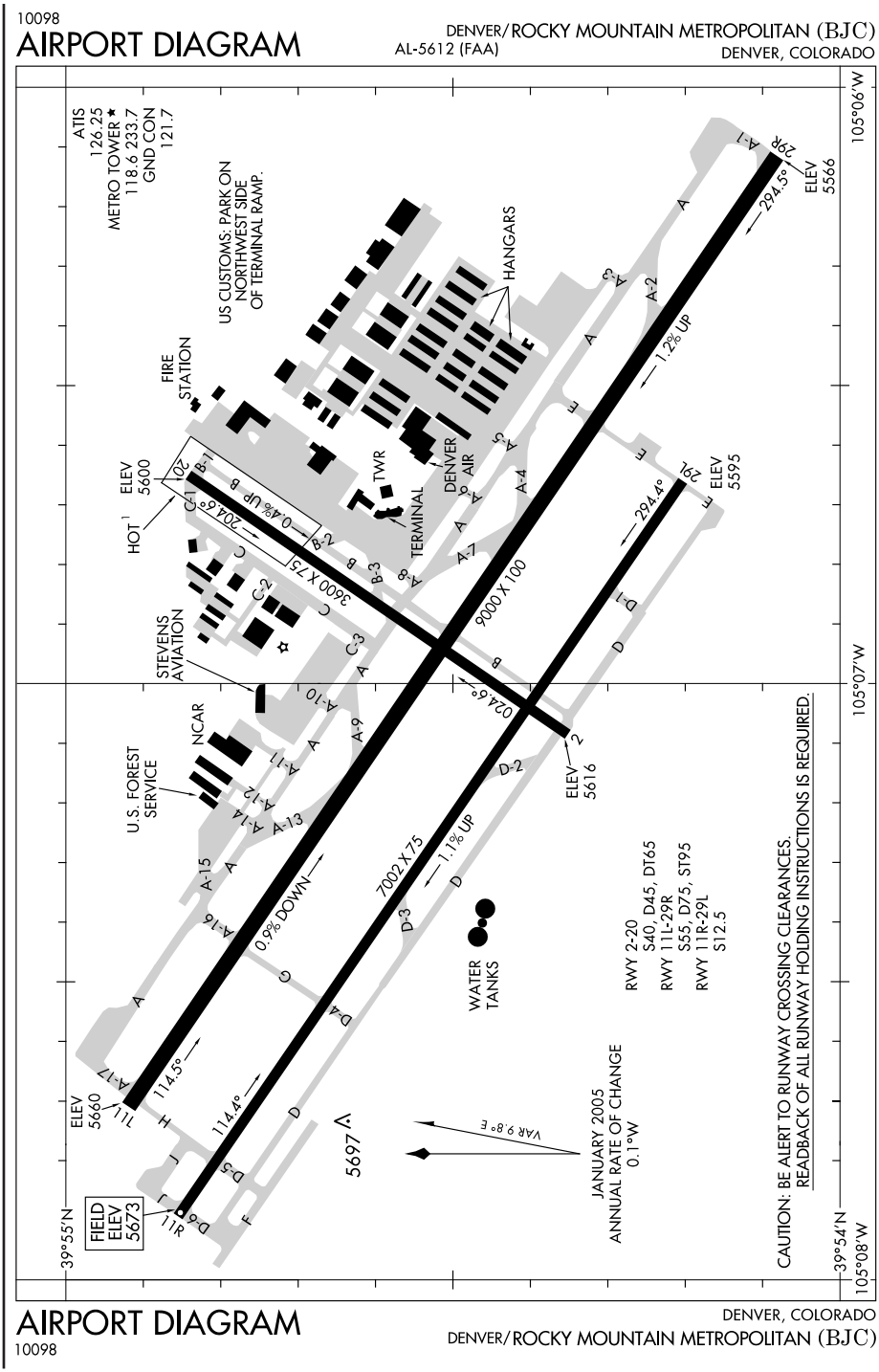
AL-9077 (FAA)



AIRPORT DIAGRAM

DENVER, COLORADO
DENVER INTL (DEN)

09351

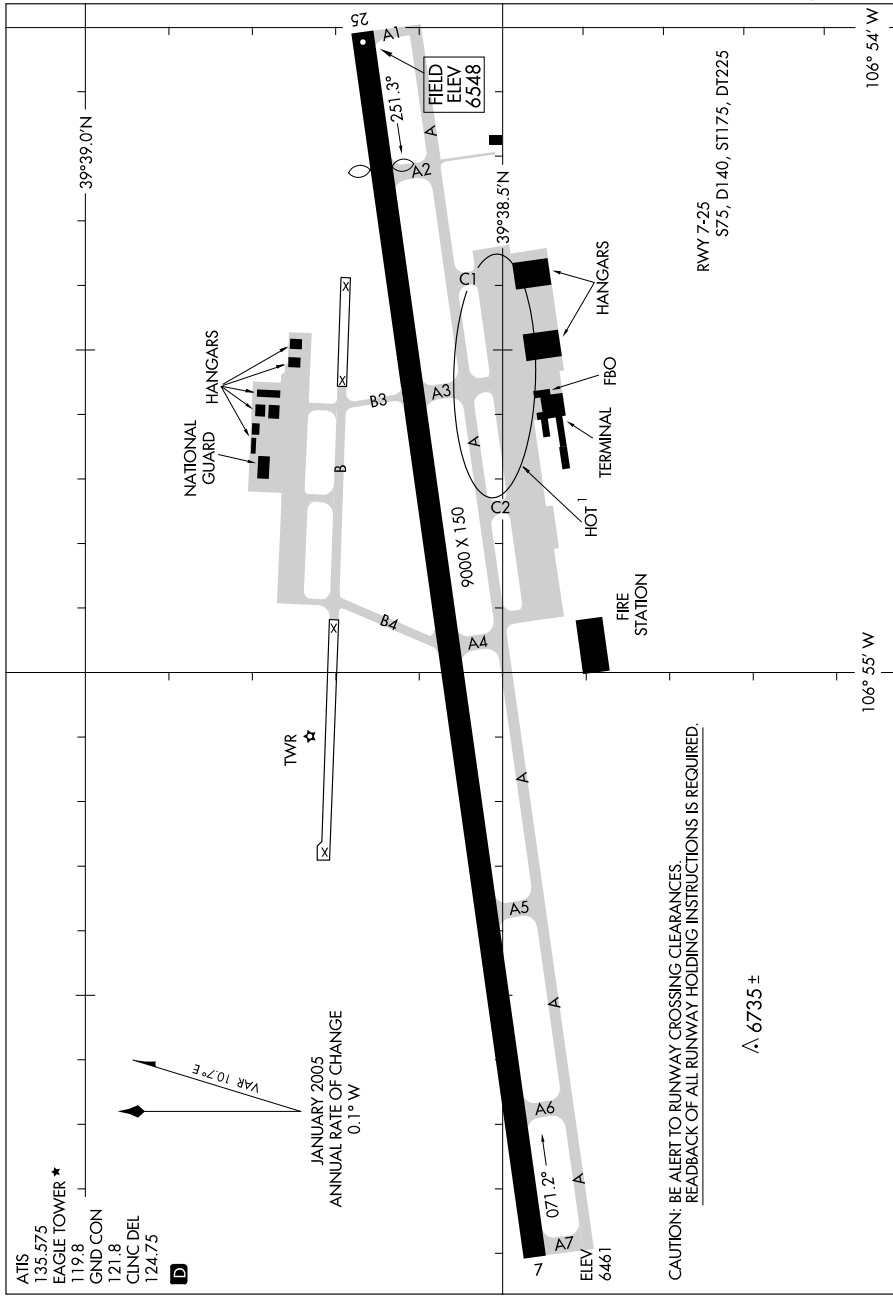

10098
AIRPORT DIAGRAM
DENVER/ROCKY MOUNTAIN METROPOLITAN (BJC)
AL-5612 (FAA)
DENVER, COLORADO
ATIS 126.25
METRO TOWER ★ 118.6 233.7
GND CON 121.7
US CUSTOMS: PARK ON NORTHWEST SIDE OF TERMINAL RAMP.
FIRE STATION
HANGARS
ELEV 5566
ELEV 5600
HOT 1
TWR
TERMINAL
DENVER AIR
ELEV 5595
STEVENS AVIATION
NCAR
U.S. FOREST SERVICE
ELEV 5616
3600 X 75
9000 X 100
7002 X 75
1.2% UP
0.4% UP
0.9% DOWN
1.1% UP
294.5°
294.4°
204.6°
024.6°
114.5°
114.4°
WATER TANKS
VAR 9.8° E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
RWY 2-20
S40, D45, DT65
RWY 11L-29R
S55, D75, ST95
RWY 11R-29L
S12.5
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
FIELD ELEV 5673
ELEV 5660
105°06'W
105°07'W
105°08'W
39°55'N
39°54'N
AIRPORT DIAGRAM
10098
DENVER, COLORADO
DENVER/ROCKY MOUNTAIN METROPOLITAN (BJC)

10042

AIRPORT DIAGRAM

AL-6403 (FAA)

EAGLE COUNTY RGNL (EGE)
EAGLE, COLORADO



AIRPORT DIAGRAM

10042

EAGLE, COLORADO
EAGLE COUNTY RGNL (EGE)

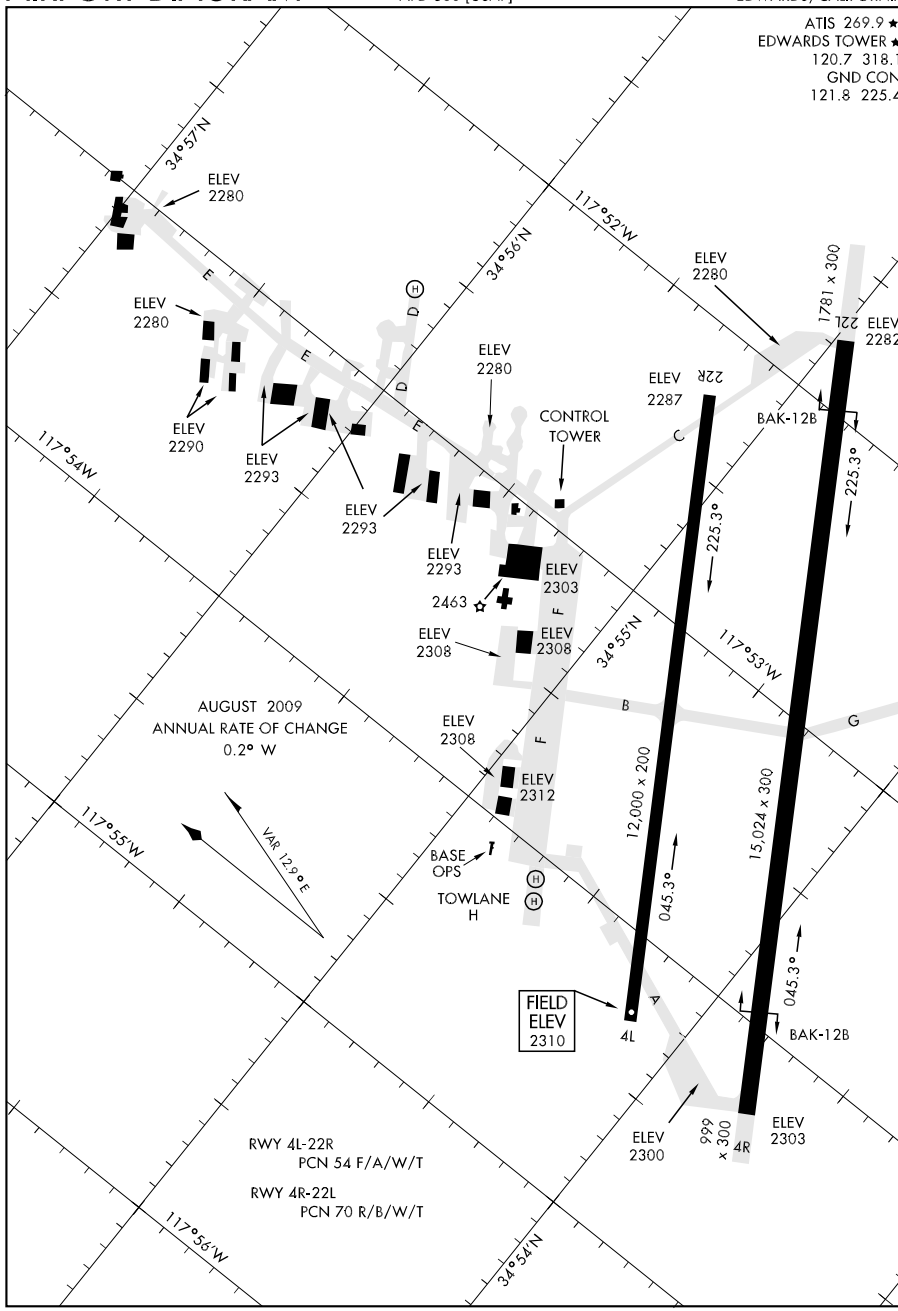
09239

AIRPORT DIAGRAM

AFD-500 [USAF]

EDWARDS AFB (KEDW)

EDWARDS, CALIFORNIA



AIRPORT DIAGRAM

EDWARDS, CALIFORNIA

EDWARDS AFB (KEDW)

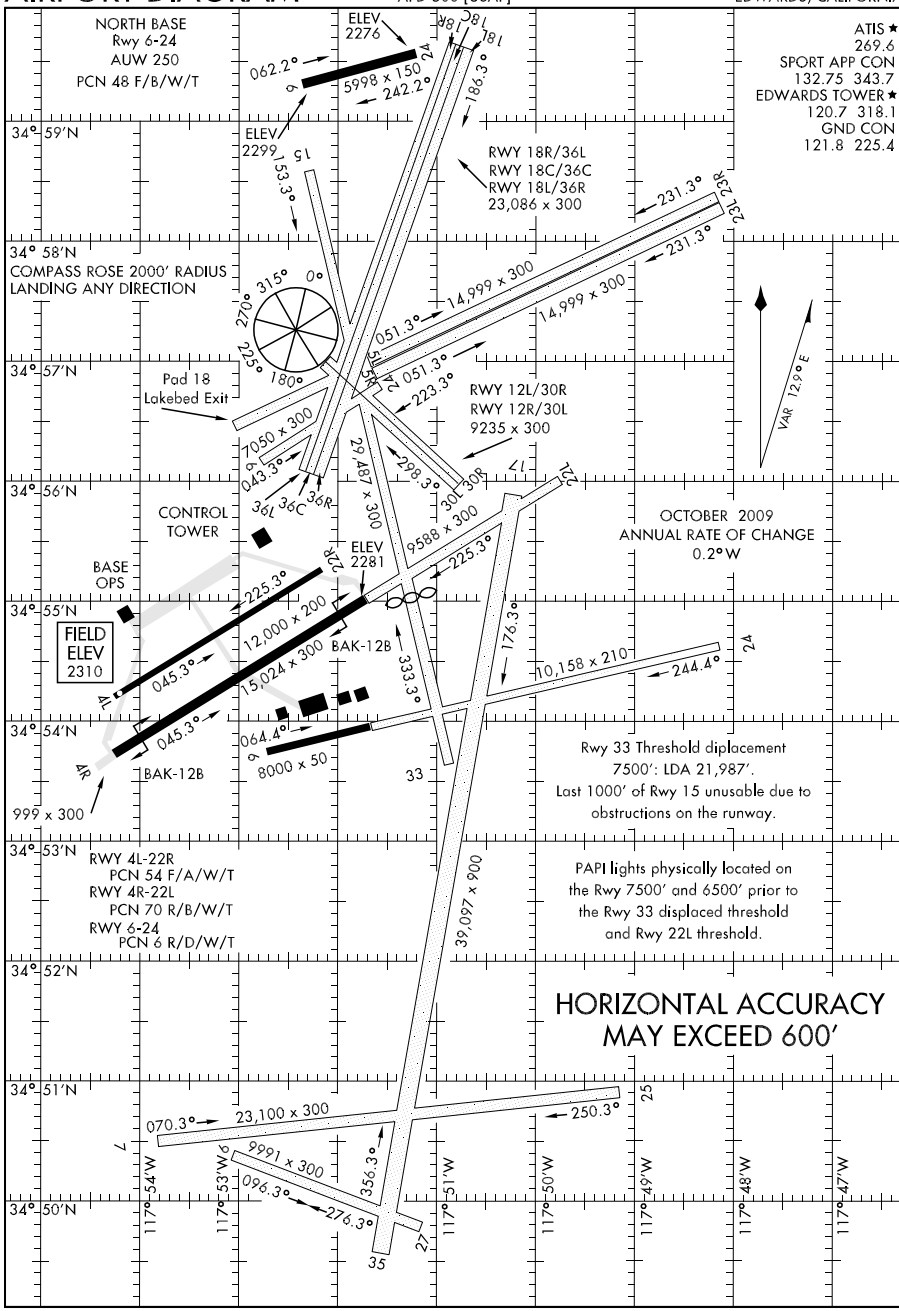
09295

EDWARDS/ROGERS LAKEBED (KEDW)

AIRPORT DIAGRAM

AFD-500 [USAF]

EDWARDS, CALIFORNIA



AIRPORT DIAGRAM

EDWARDS, CALIFORNIA

EDWARDS/ROGERS LAKEBED (KEDW)

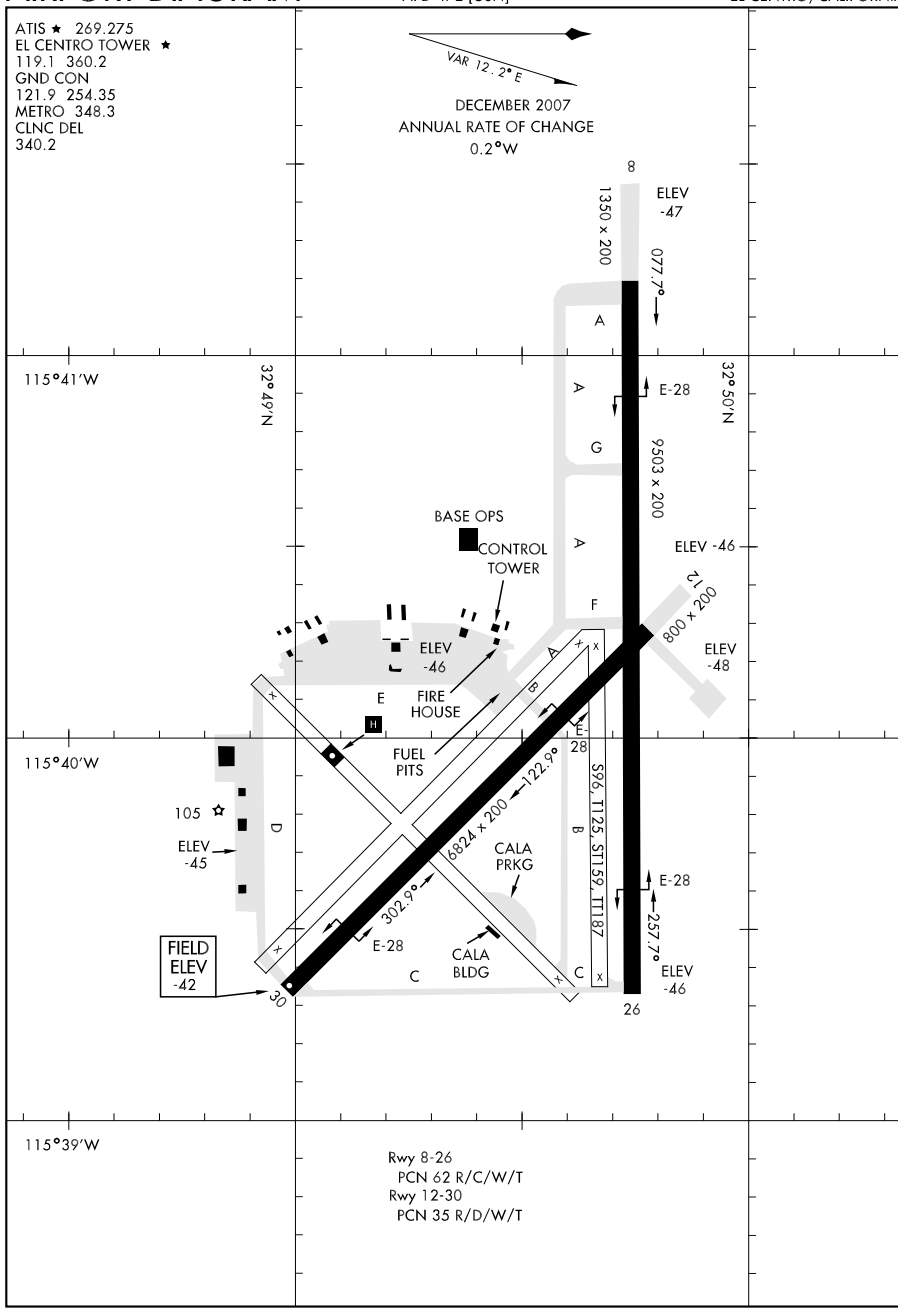
07354

AIRPORT DIAGRAM

EL CENTRO NAF (KNJK)

AFD-472 [USN]

EL CENTRO, CALIFORNIA



AIRPORT DIAGRAM

EL CENTRO, CALIFORNIA

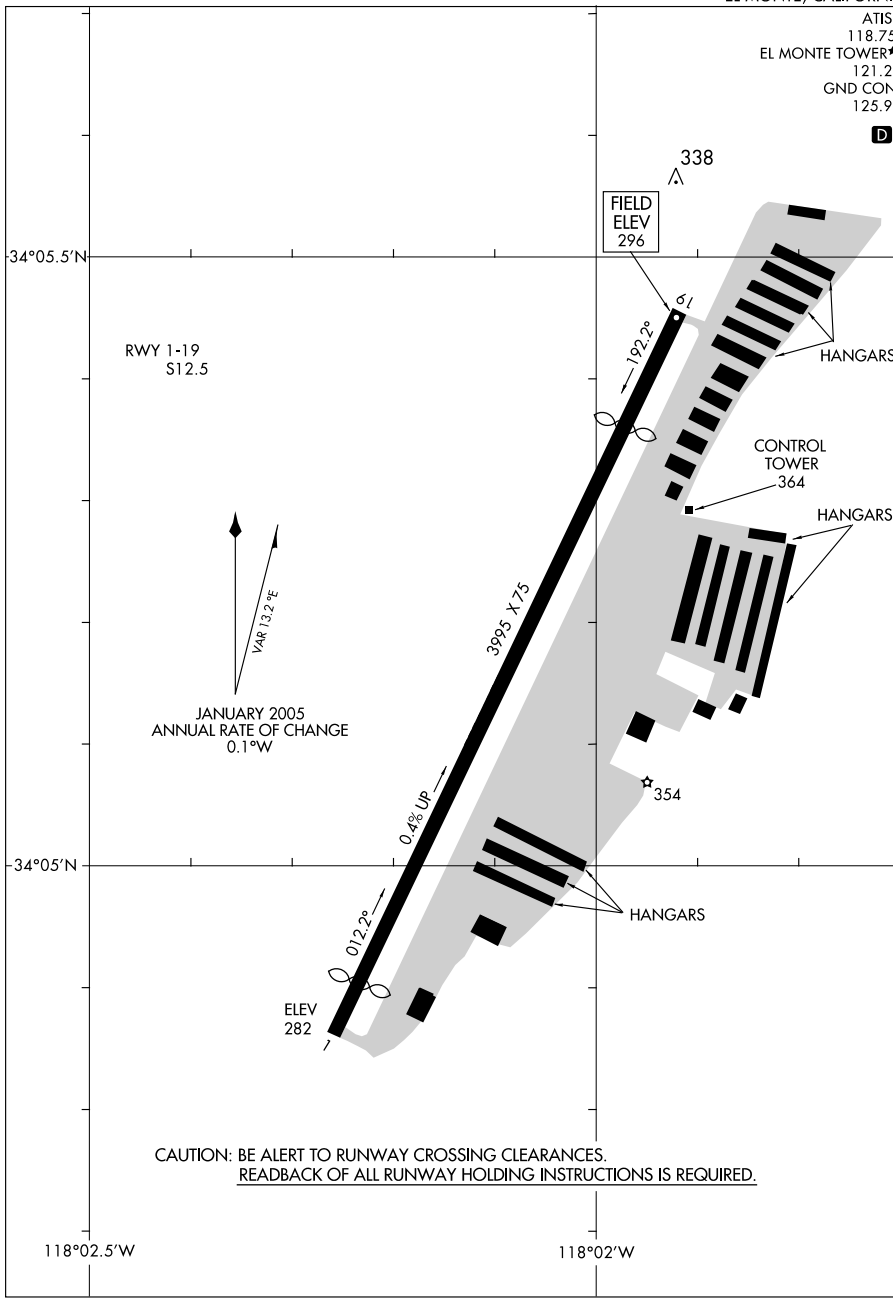
EL CENTRO NAF (KNJK)

09071

AIRPORT DIAGRAM

AL-5639 (FAA)

EL MONTE (EMT)
EL MONTE, CALIFORNIA



AIRPORT DIAGRAM

09071

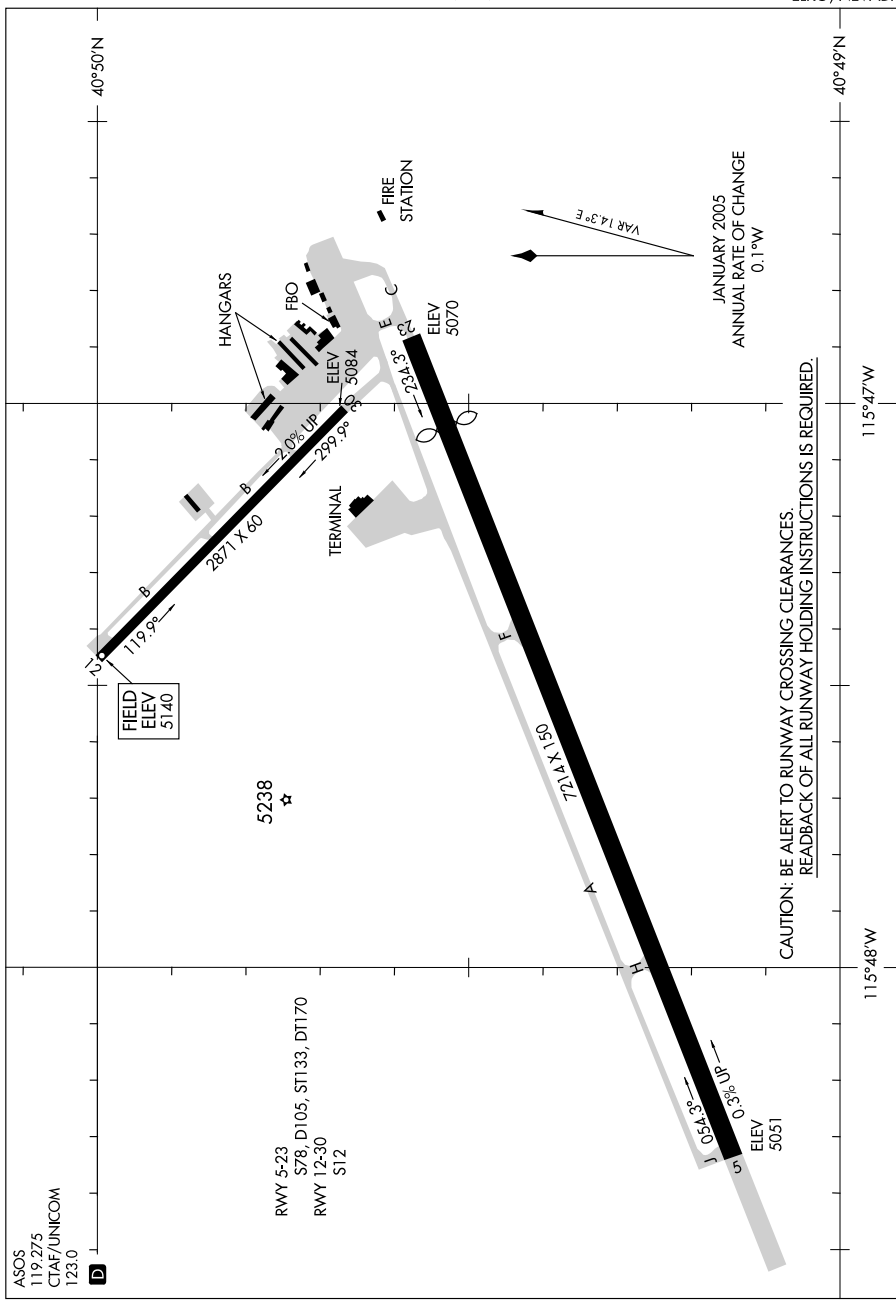
EL MONTE, CALIFORNIA
EL MONTE (EMT)

09071

AIRPORT DIAGRAM

AL-129 (FAA)

ELKO RGNL (EKO)
ELKO, NEVADA



AIRPORT DIAGRAM

ELKO, NEVADA
ELKO RGNL (EKO)

09071

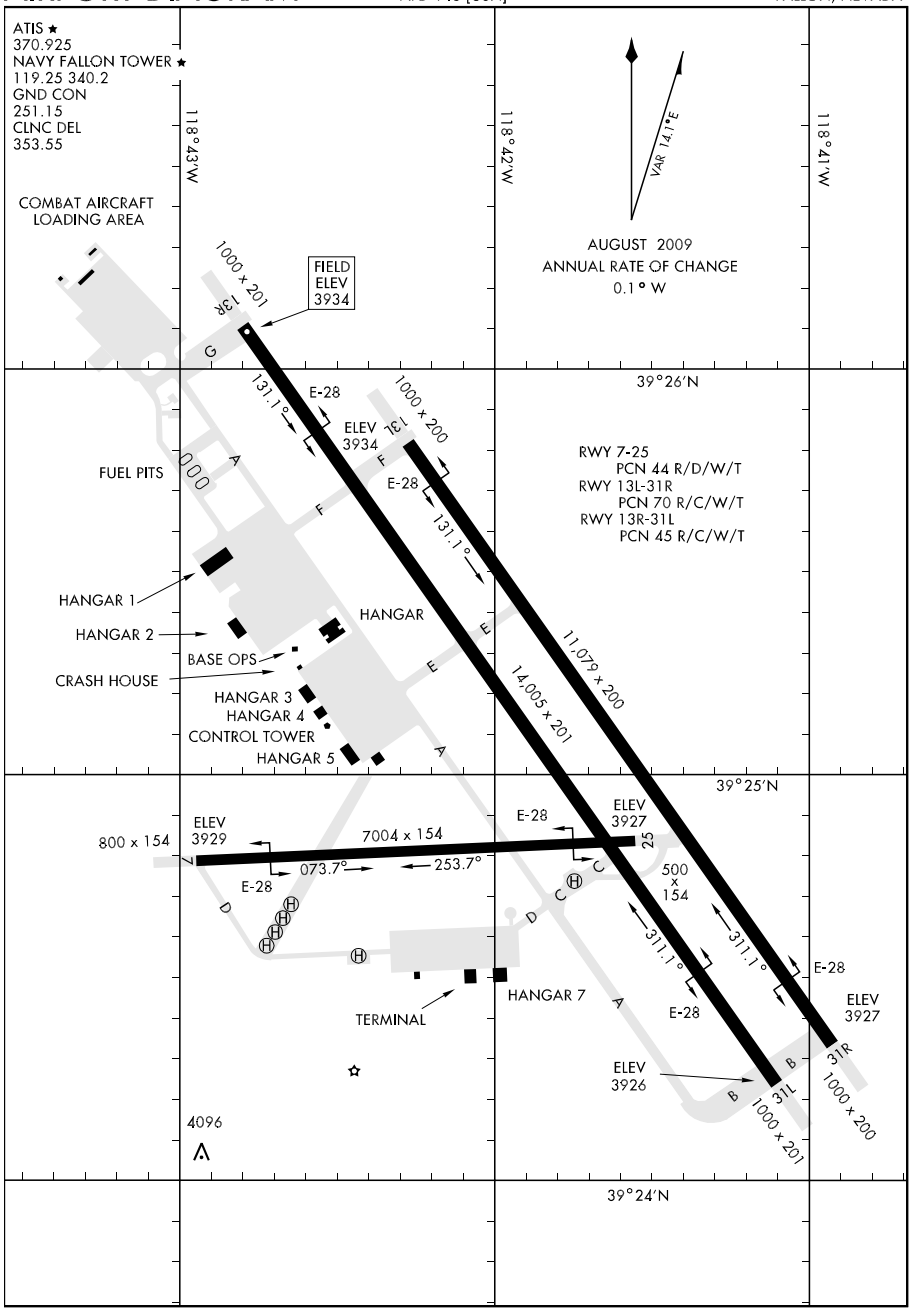
09267

AIRPORT DIAGRAM

FALLON NAS (VAN VOORHIS FIELD) (KNFL)

AFD-143 [USN]

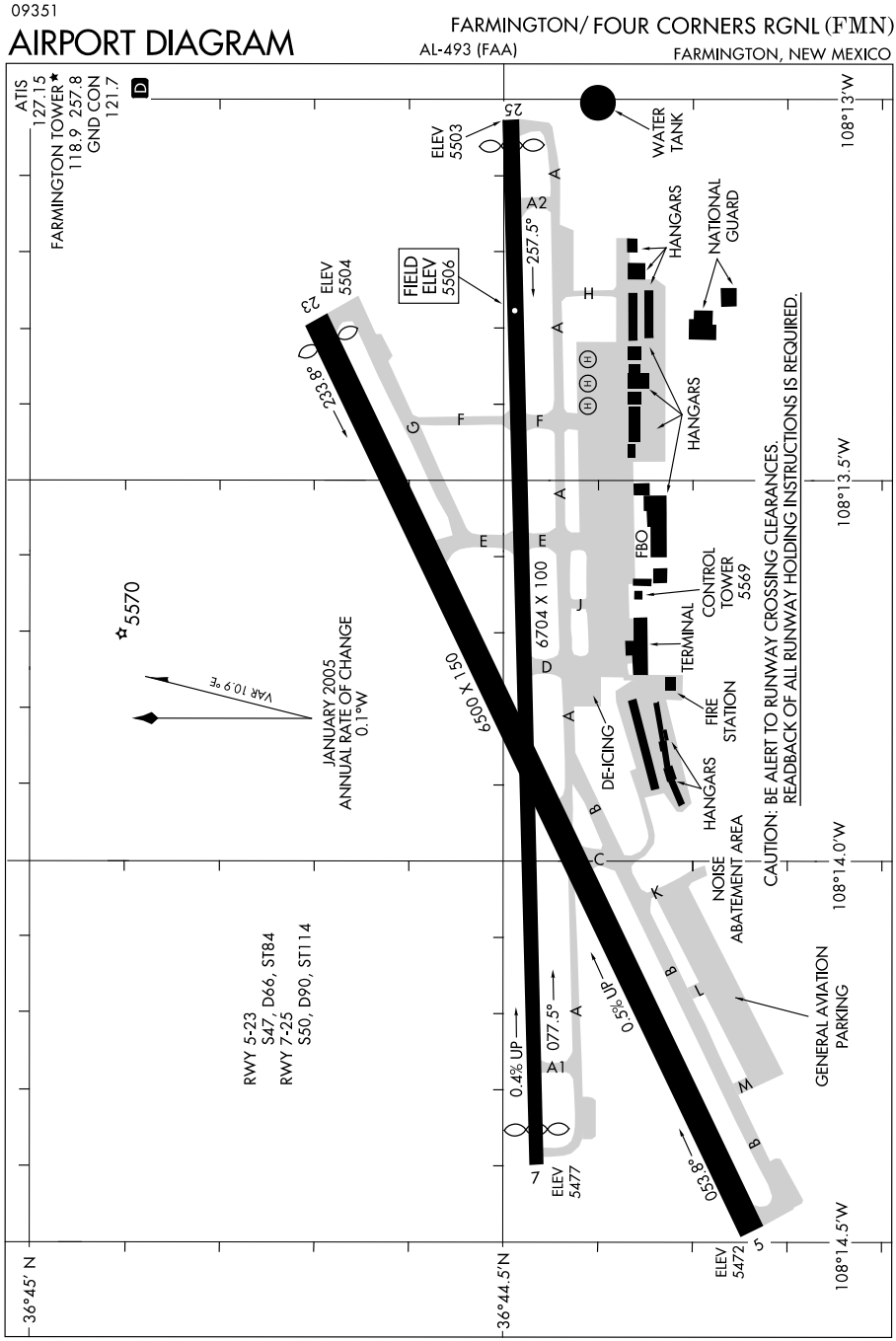
FALLON, NEVADA



AIRPORT DIAGRAM

FALLON, NEVADA

FALLON NAS (VAN VOORHIS FIELD) (KNFL)

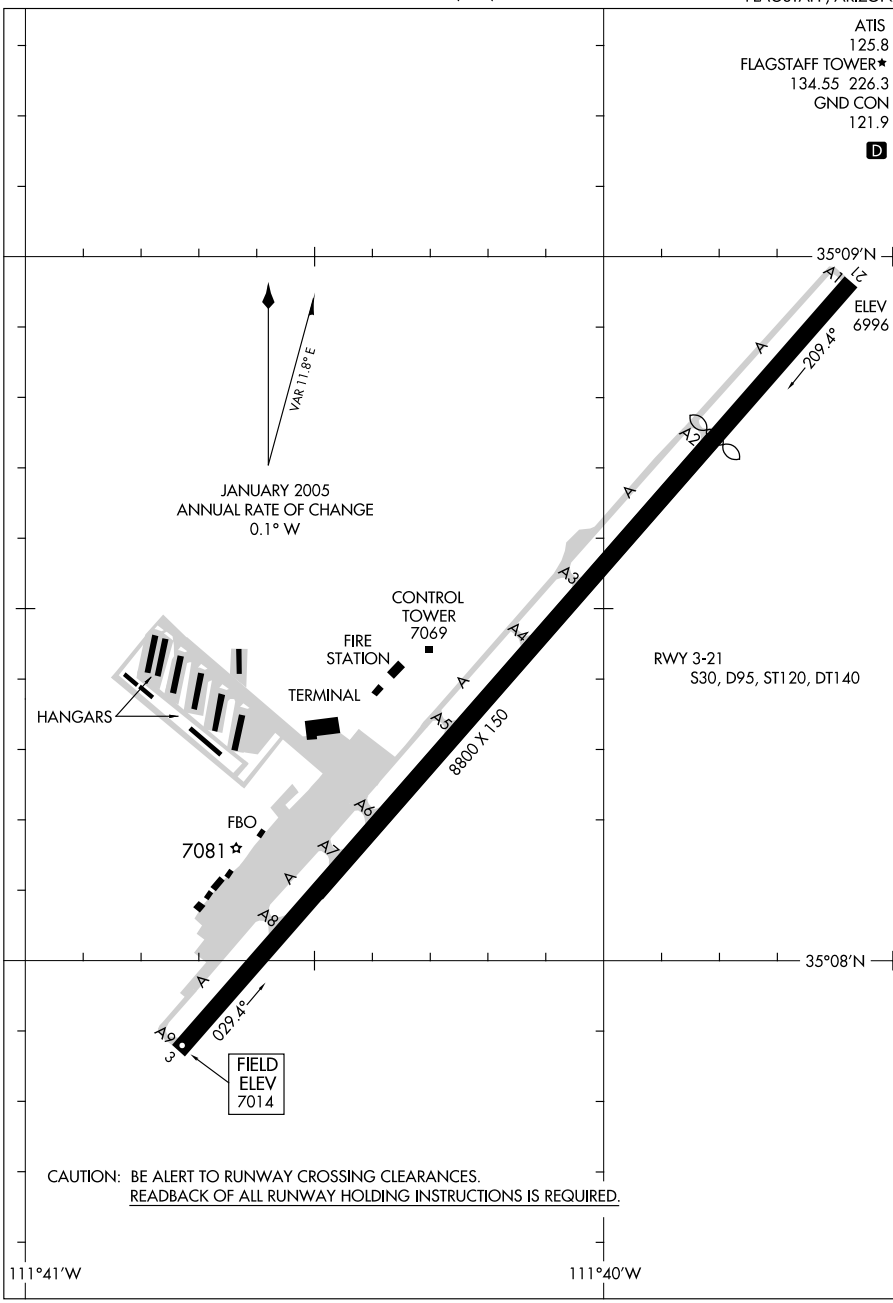

09351
AIRPORT DIAGRAM
FARMINGTON/ FOUR CORNERS RGNL (FMN)
AL-493 (FAA)
FARMINGTON, NEW MEXICO
ATIS 127.15
FARMINGTON TOWER★ 118.9 257.8
GND CON 121.7
D
ELEV 5503
WATER TANK
108°13'W
HANGARS
NATIONAL GUARD
FIELD ELEV 5506
ELEV 5504
257.5°
223.8°
HANGARS
108°13.5'W
FBO
CONTROL TOWER 5569
TERMINAL
6704 X 100
5570
VAR 10.9°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
6500 X 150
FIRE STATION
DE-ICING
HANGARS
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
NOISE ABATEMENT AREA
108°14.0'W
RWY 5-23
S47, D66, ST84
RWY 7-25
S50, D90, ST114
0.4% UP
077.5°
0.5% UP
053.8°
GENERAL AVIATION PARKING
ELEV 5477
ELEV 5472
108°14.5'W
36°45' N
36°44.5'N
AIRPORT DIAGRAM
09351
FARMINGTON, NEW MEXICO
FARMINGTON/ FOUR CORNERS RGNL (FMN)

09239

AIRPORT DIAGRAM

AL-5034 (FAA)

FLAGSTAFF PULLIAM (FLG)
FLAGSTAFF, ARIZONA



AIRPORT DIAGRAM

09239

FLAGSTAFF, ARIZONA
FLAGSTAFF PULLIAM (FLG)

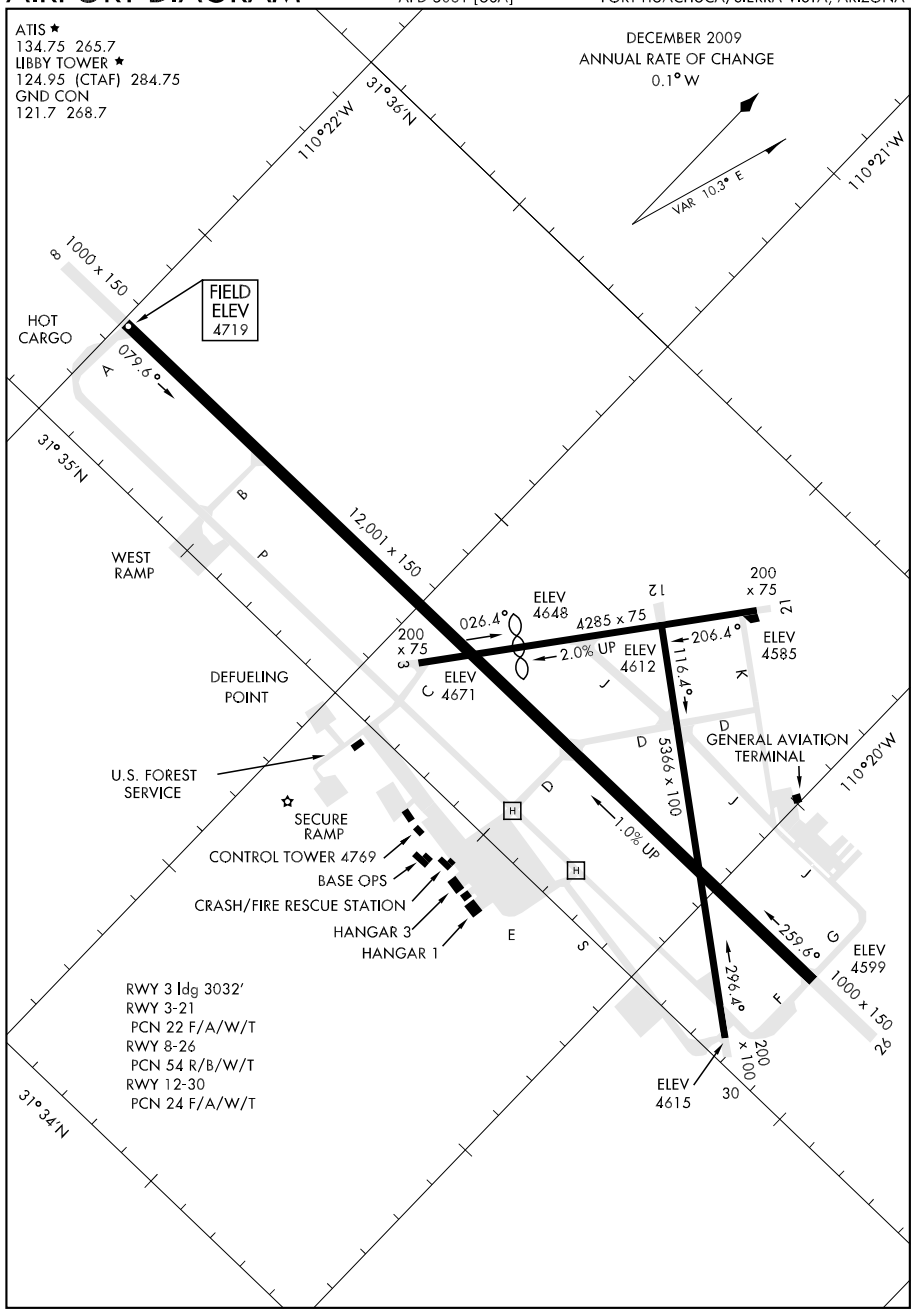
09351

AIRPORT DIAGRAM

FORT HUACHUCA-SIERRA VISTA/SIERRA VISTA MUNI-LIBBY AAF (KFHU)

AFD-5081 [USA]

FORT HUACHUCA/SIERRA VISTA, ARIZONA



AIRPORT DIAGRAM

FORT HUACHUCA/SIERRA VISTA, ARIZONA

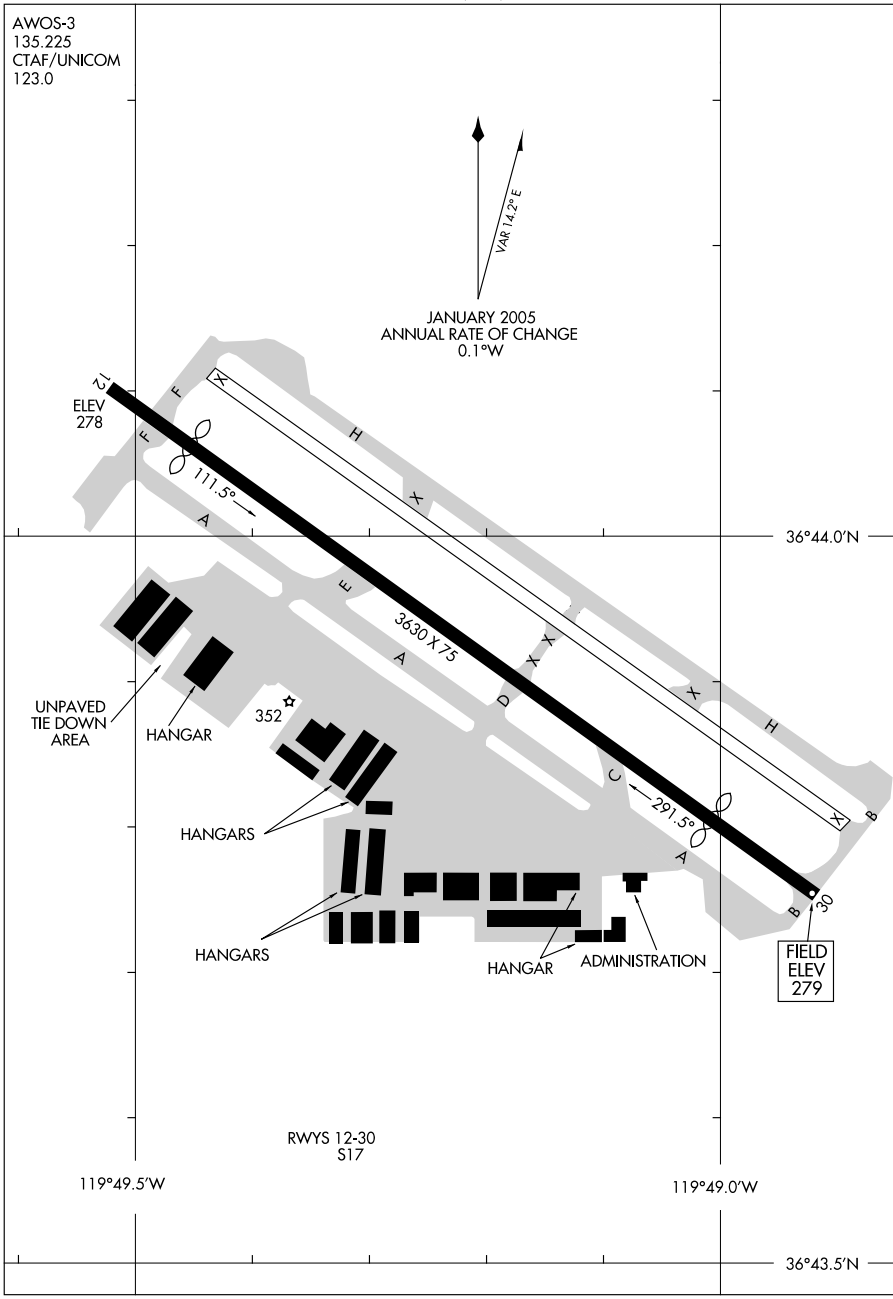
FORT HUACHUCA-SIERRA VISTA/SIERRA VISTA MUNI-LIBBY AAF (KFHU)

09071

AIRPORT DIAGRAM

AL-161 (FAA)

FRESNO CHANDLER EXECUTIVE (FCH)
FRESNO, CALIFORNIA



AIRPORT DIAGRAM

09071

FRESNO, CALIFORNIA
FRESNO CHANDLER EXECUTIVE (FCH)

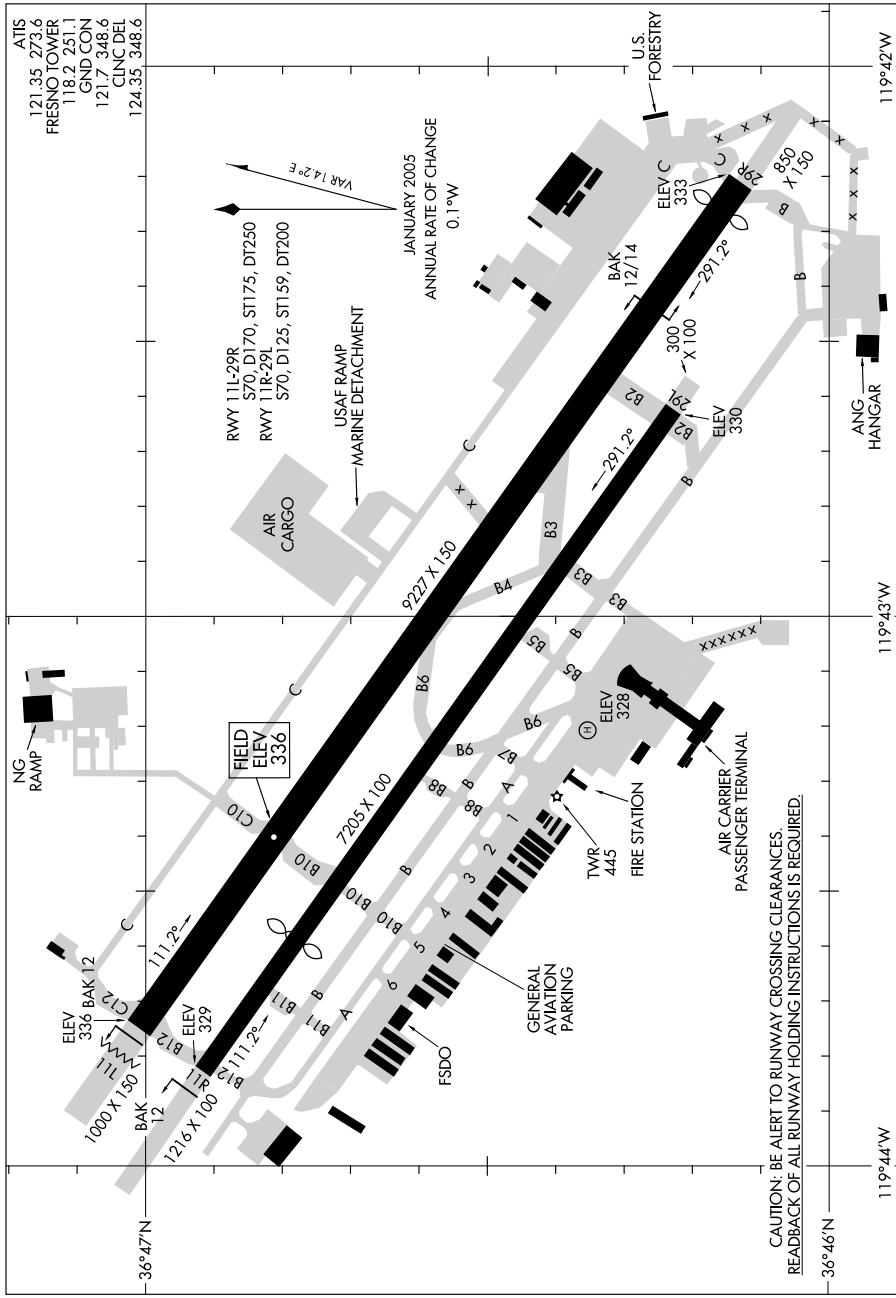
09351

AIRPORT DIAGRAM

AL-162 (FAA)

FRESNO YOSEMITE INTL (FAT)

FRESNO, CALIFORNIA



AIRPORT DIAGRAM

09351

FRESNO, CALIFORNIA

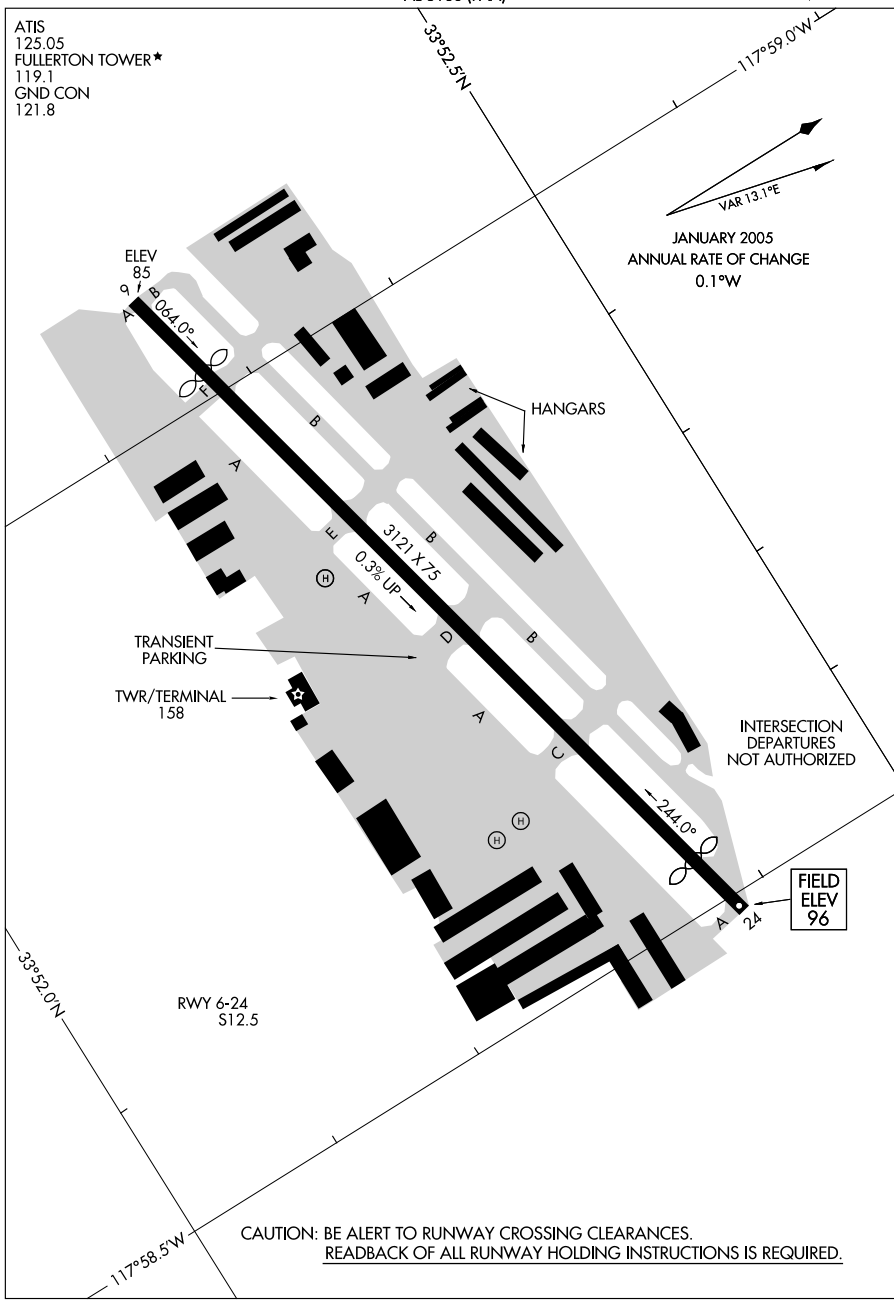
FRESNO YOSEMITE INTL (FAT)

09295

AIRPORT DIAGRAM

FULLERTON MUNI (FUL)
FULLERTON, CALIFORNIA

AL-5136 (FAA)



AIRPORT DIAGRAM

09295

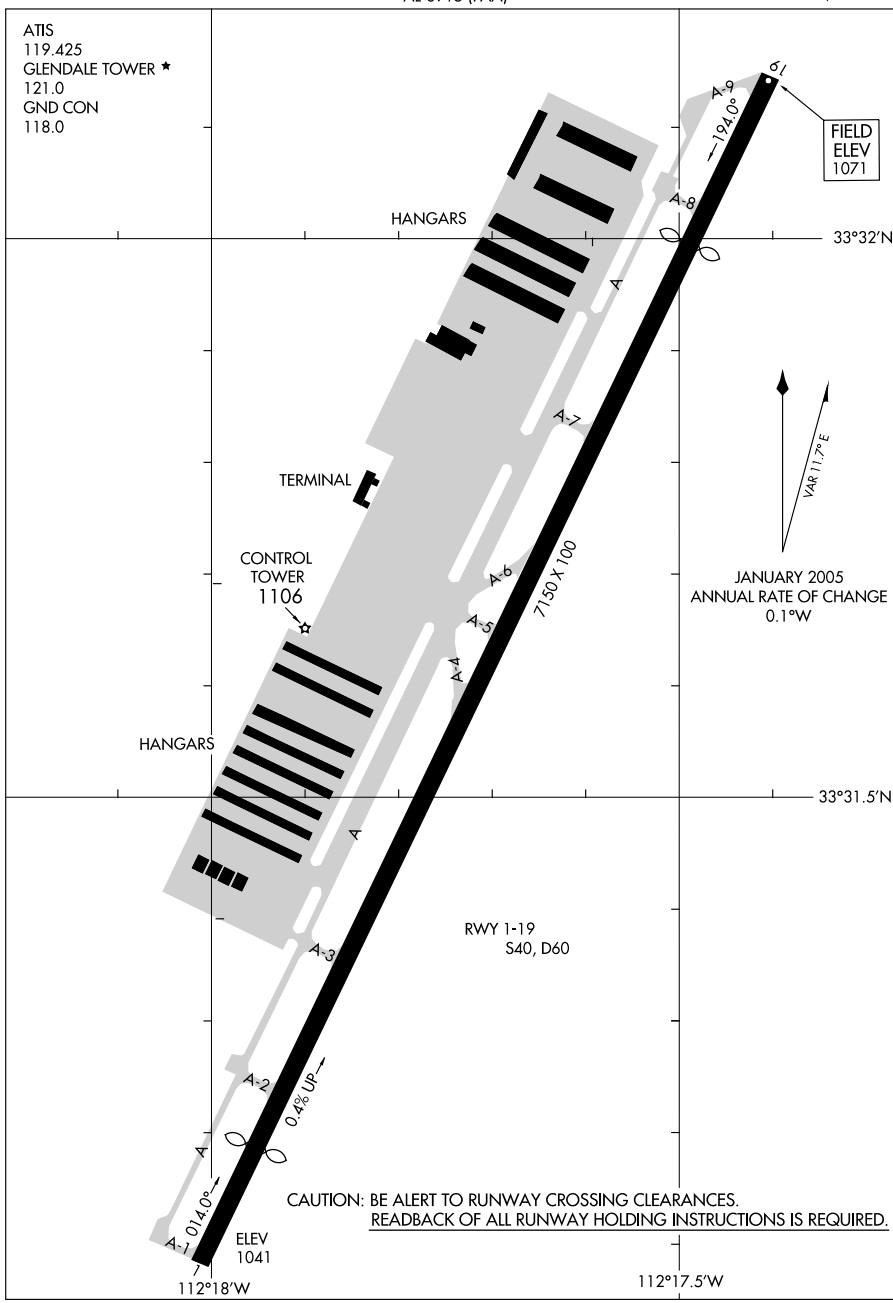
FULLERTON, CALIFORNIA
FULLERTON MUNI (FUL)

09071

AIRPORT DIAGRAM

AL-6915 (FAA)

GLENDALE MUNI (GEU)
GLENDALE, ARIZONA



AIRPORT DIAGRAM
09071

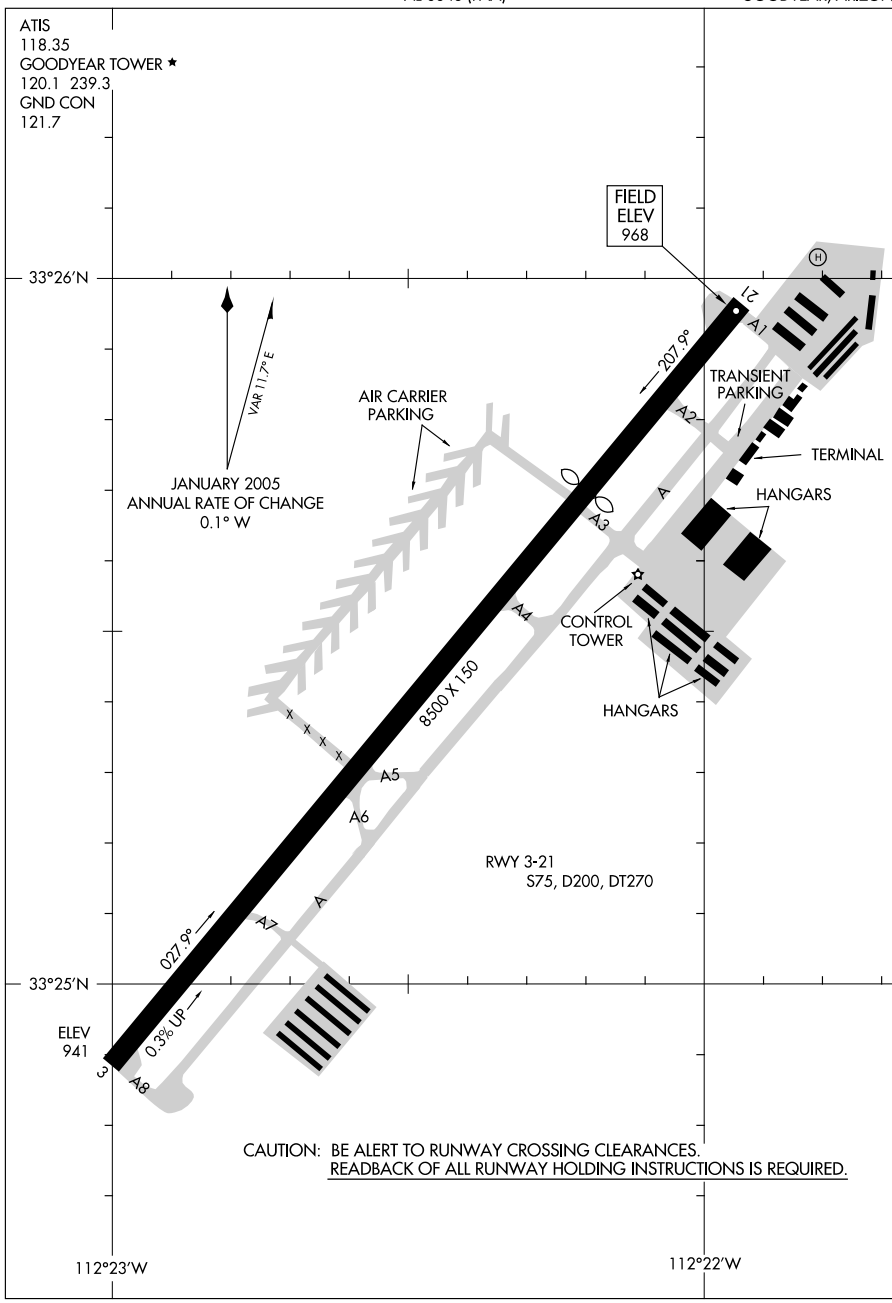
GLENDALE, ARIZONA
GLENDALE MUNI (GEU)

09071

AIRPORT DIAGRAM

AL-6648 (FAA)

GOODYEAR/ PHOENIX GOODYEAR (GYR)
GOODYEAR, ARIZONA



AIRPORT DIAGRAM

09071

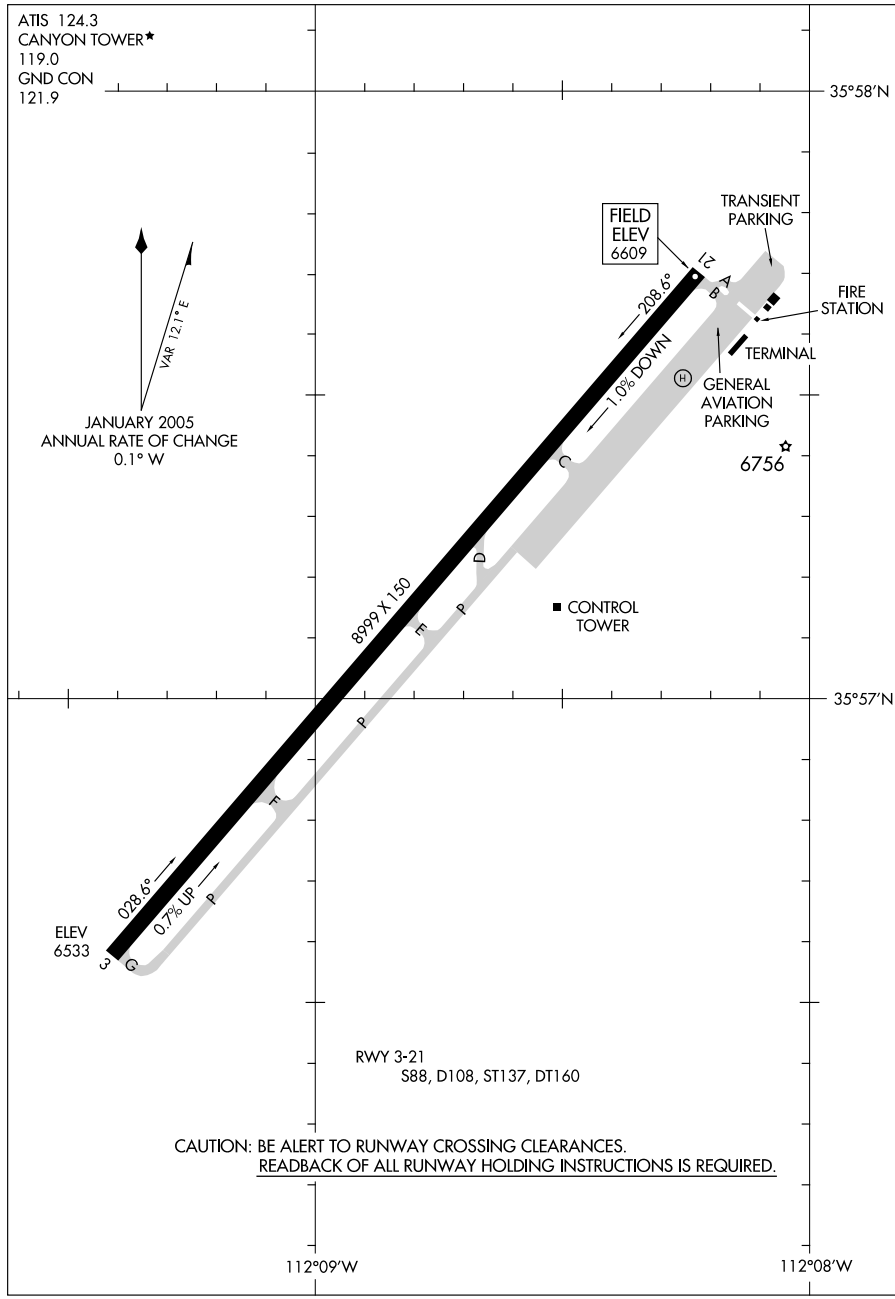
GOODYEAR, ARIZONA
GOODYEAR/ PHOENIX GOODYEAR (GYR)

06271

AIRPORT DIAGRAM

GRAND CANYON NATIONAL PARK (GCN)
GRAND CANYON, ARIZONA

AL-5381 (FAA)



AIRPORT DIAGRAM

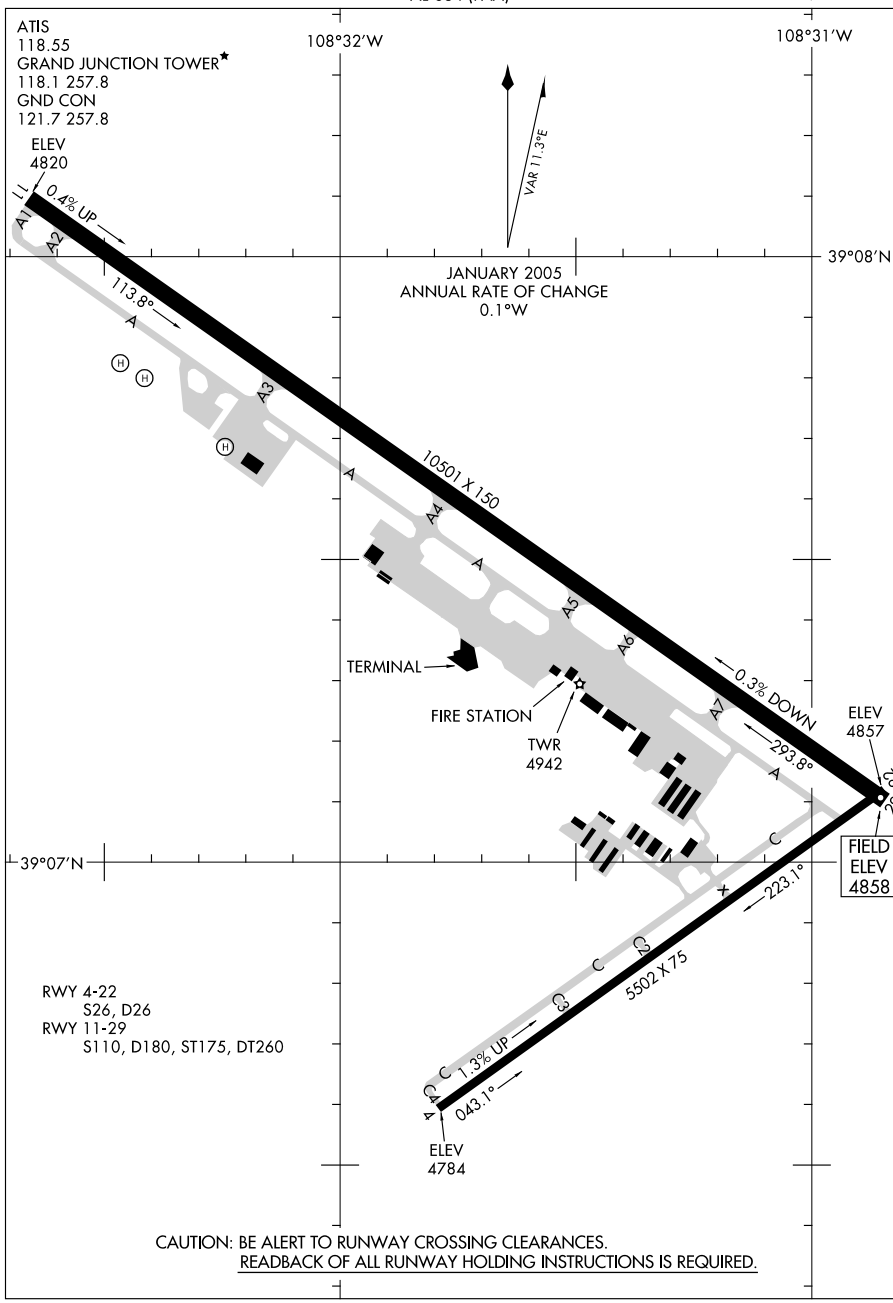
06271

GRAND CANYON, ARIZONA
GRAND CANYON NATIONAL PARK (GCN)

10098

AIRPORT DIAGRAM

GRAND JUNCTION RGNL (GJT)
GRAND JUNCTION, COLORADO



AIRPORT DIAGRAM

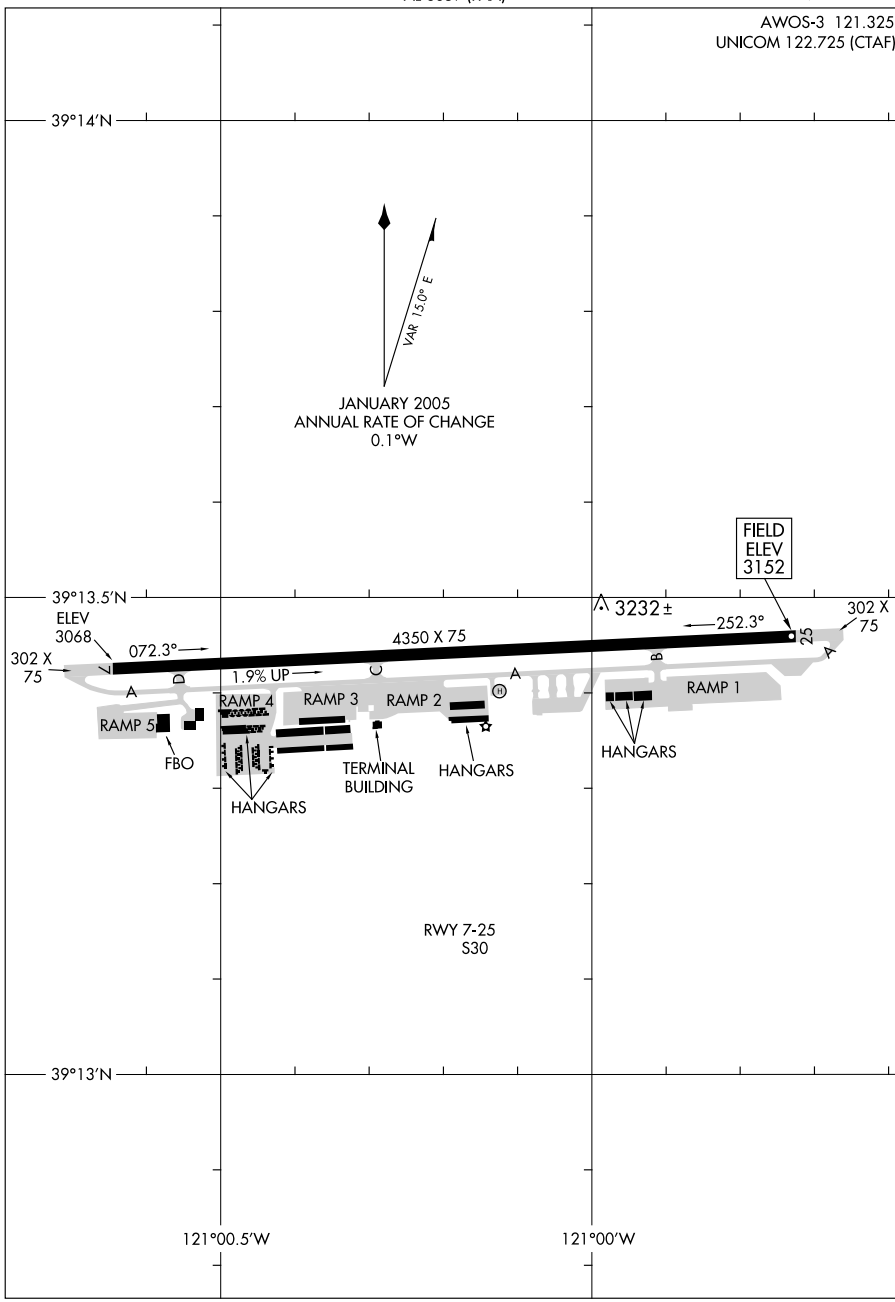
10098

GRAND JUNCTION, COLORADO
GRAND JUNCTION RGNL (GJT)

06327

AIRPORT DIAGRAM

GRASS VALLEY/ NEVADA COUNTY AIRPARK (GOO)
GRASS VALLEY, CALIFORNIA
AL-6659 (FAA)



AIRPORT DIAGRAM

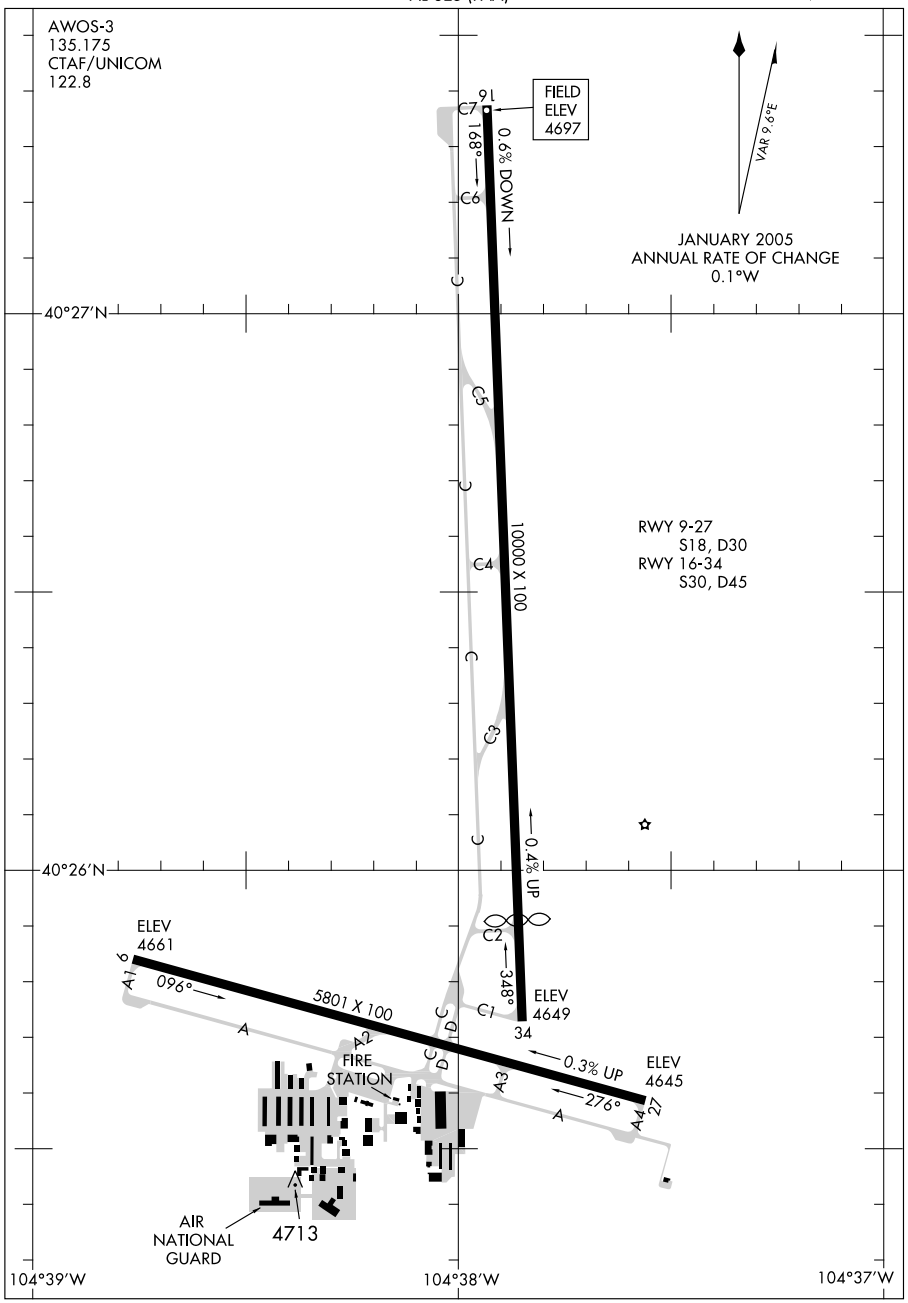
06327

GRASS VALLEY, CALIFORNIA
GRASS VALLEY/ NEVADA COUNTY AIRPARK (GOO)

09071

AIRPORT DIAGRAM

GREELEY-WELD COUNTY (GXY)
GREELEY, COLORADO



AIRPORT DIAGRAM

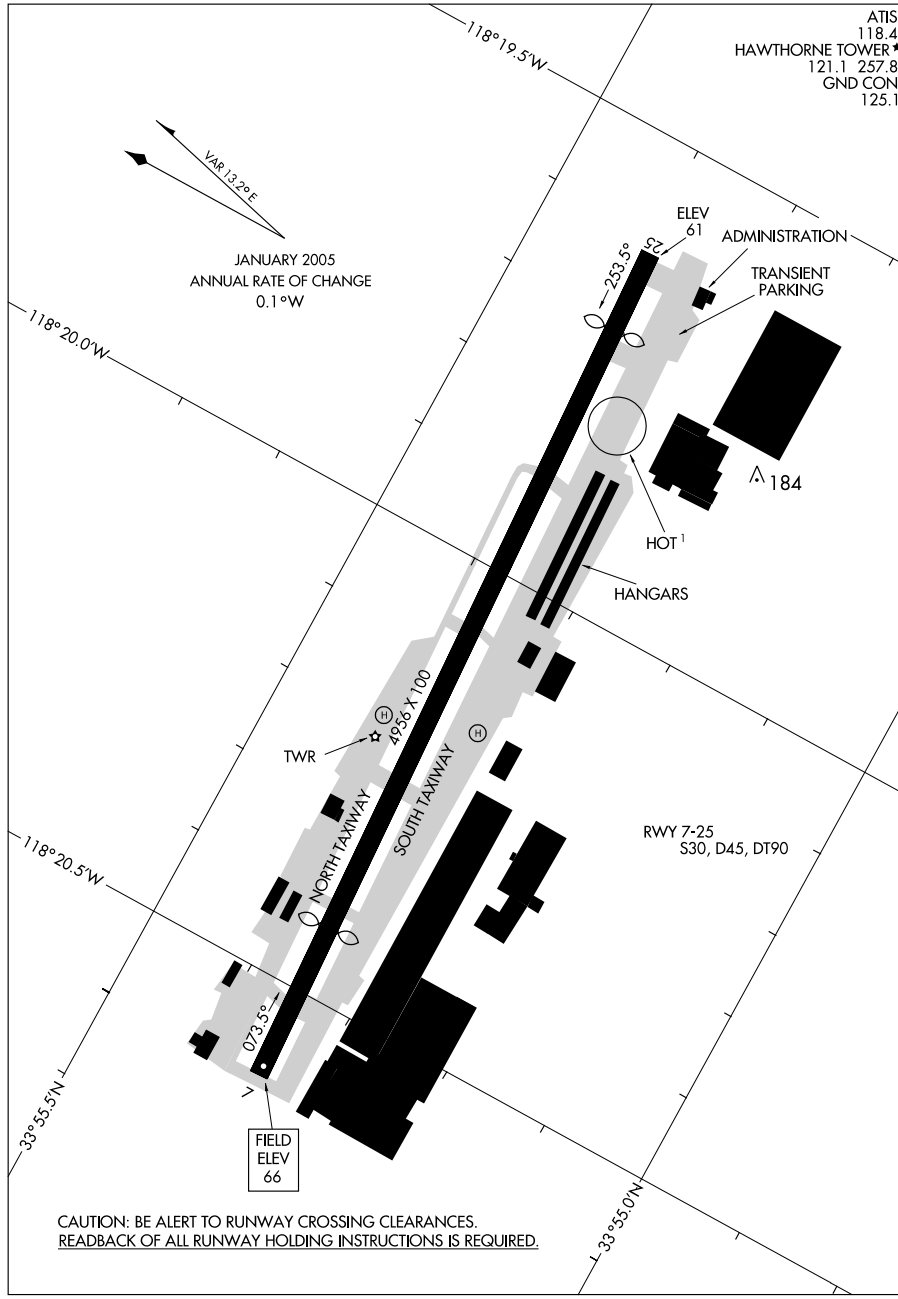
09071

GREELEY, COLORADO
GREELEY-WELD COUNTY (GXY)

10098

AIRPORT DIAGRAM

HAWTHORNE/JACK NORTHROP FIELD/HAWTHORNE MUNI (HHR)
AL-5120 (FAA)
HAWTHORNE, CALIFORNIA



AIRPORT DIAGRAM

10098

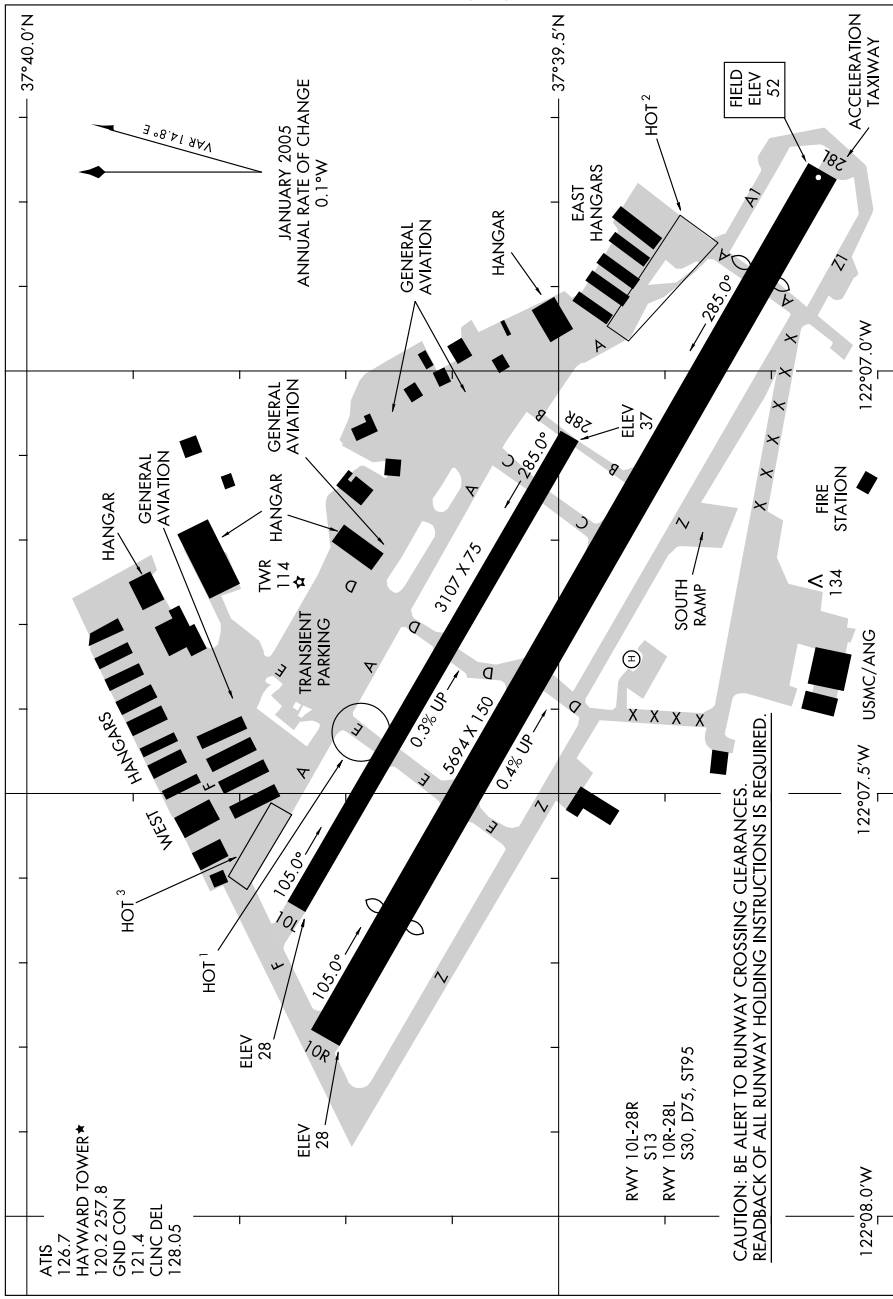
HAWTHORNE, CALIFORNIA
HAWTHORNE/JACK NORTHROP FIELD/HAWTHORNE MUNI (HHR)

09295

AIRPORT DIAGRAM

AL-5015 (FAA)

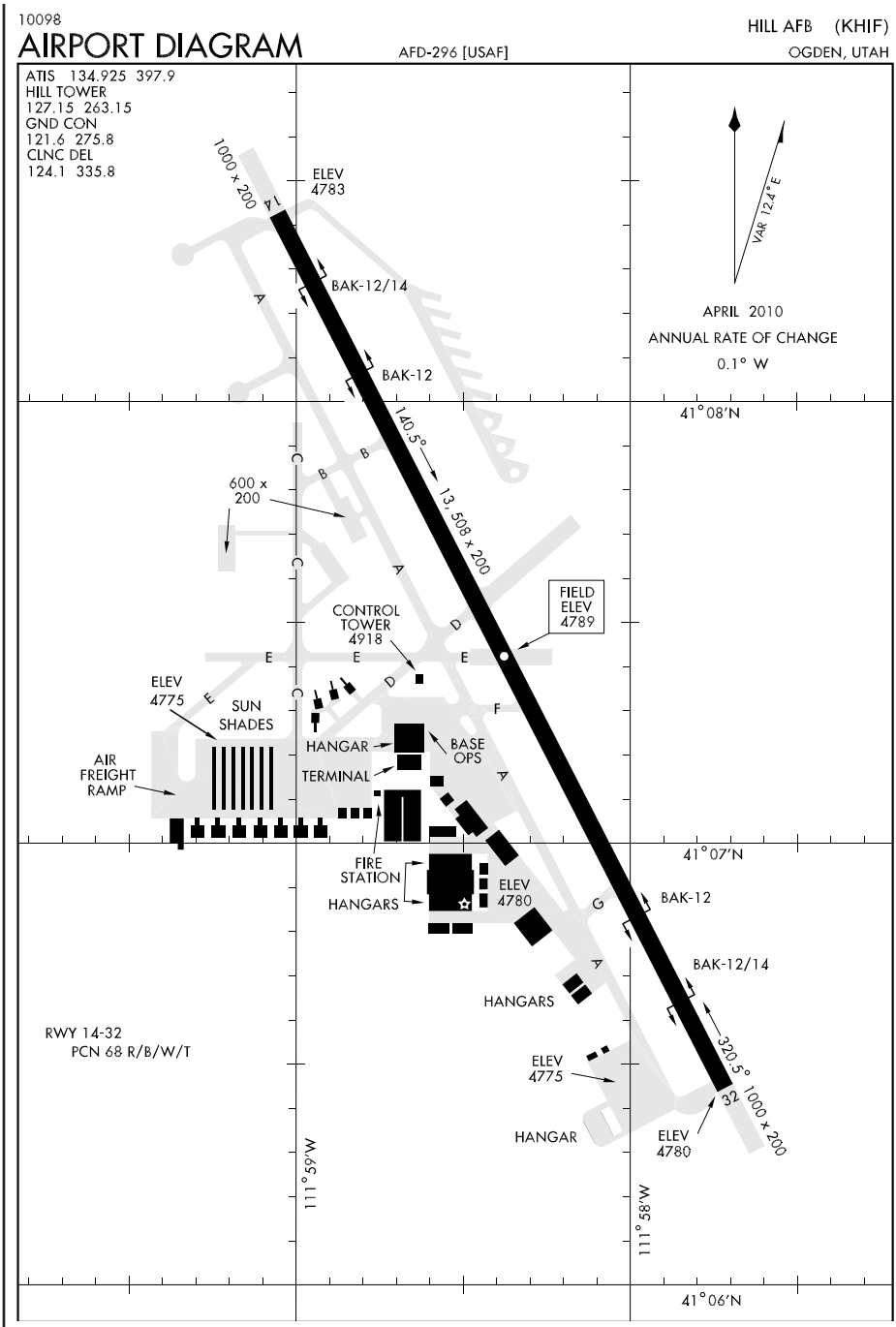
HAYWARD EXECUTIVE (HWD)
HAYWARD, CALIFORNIA



AIRPORT DIAGRAM

09295

HAYWARD, CALIFORNIA
HAYWARD EXECUTIVE (HWD)

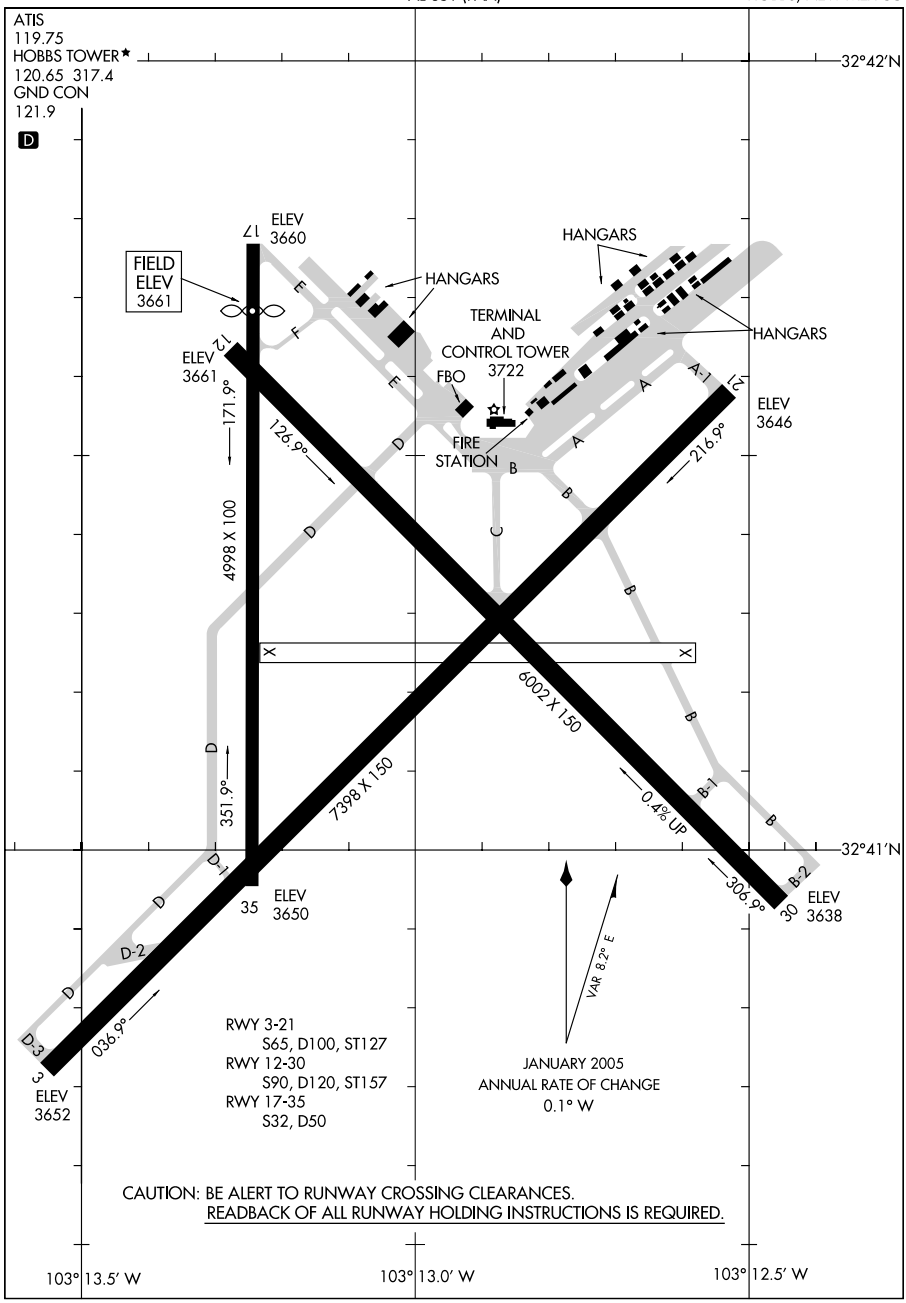

10098
AIRPORT DIAGRAM
AFD-296 [USAF]
HILL AFB (KHIF)
OGDEN, UTAH
ATIS 134.925 397.9
HILL TOWER
127.15 263.15
GND CON
121.6 275.8
CLNC DEL
124.1 335.8
1000 x 200
ELEV 4783
BAK-12/14
BAK-12
VAR 12.4° E
APRIL 2010
ANNUAL RATE OF CHANGE
0.1° W
41°08'N
140.5°
13,508 x 200
600 x 200
FIELD ELEV 4789
CONTROL TOWER 4918
ELEV 4775
SUN SHADES
HANGAR
BASE OPS
TERMINAL
AIR FREIGHT RAMP
FIRE STATION
HANGARS
ELEV 4780
41°07'N
BAK-12
BAK-12/14
HANGARS
320.5°
1000 x 200
32
RWY 14-32
PCN 68 R/B/W/T
ELEV 4775
HANGAR
ELEV 4780
111°59'W
111°58'W
41°06'N

09351

AIRPORT DIAGRAM

HOBBS/LEA COUNTY RGNL (HOB)
HOBBS, NEW MEXICO

AL-851 (FAA)



AIRPORT DIAGRAM
09351
HOBBS, NEW MEXICO
HOBBS/LEA COUNTY RGNL (HOB)

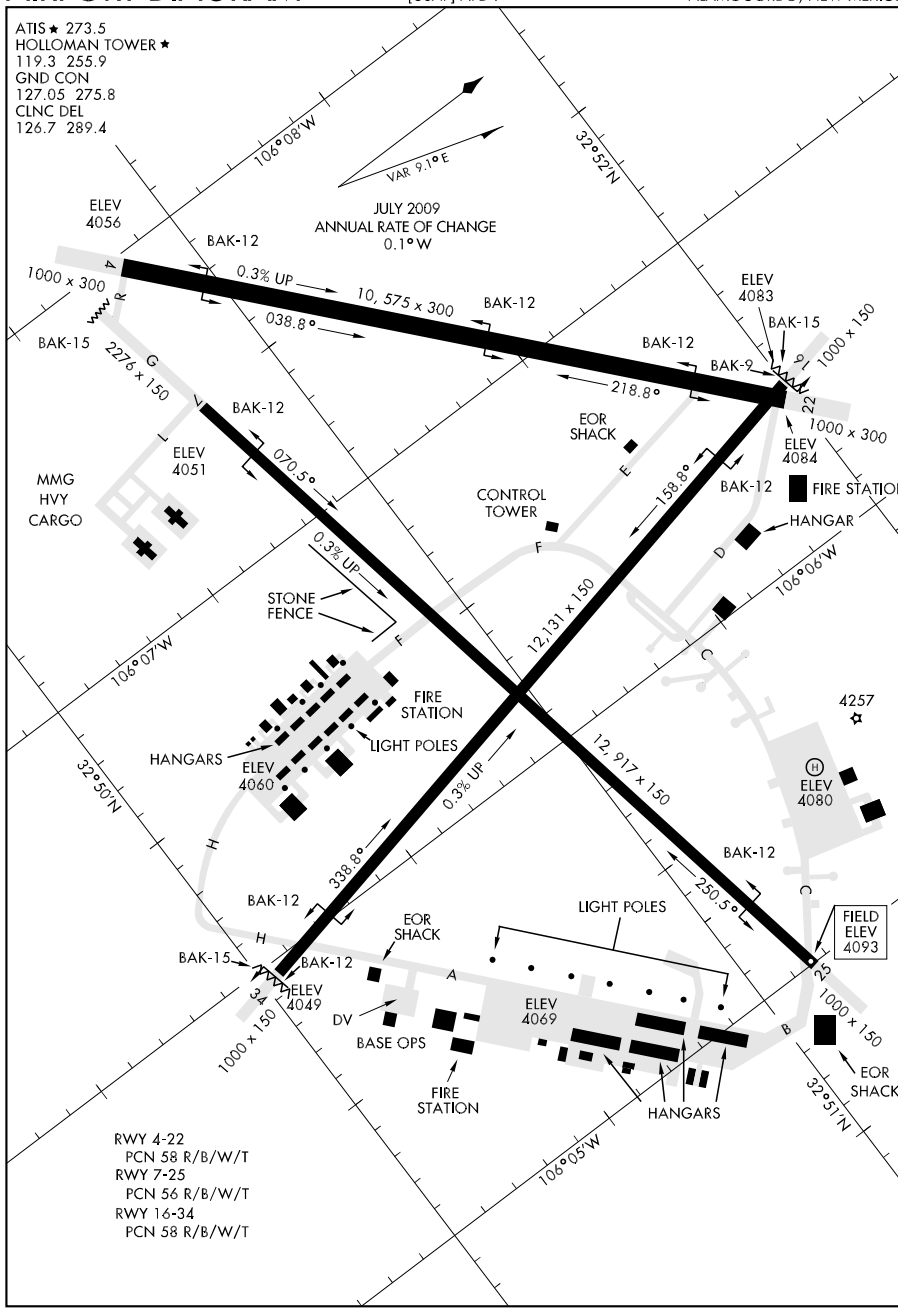
09183

AIRPORT DIAGRAM

HOLLOMAN AFB (KHMN)

[USAF] AFD-7

ALAMOGORDO, NEW MEXICO



AIRPORT DIAGRAM

WGS DATUM

ALAMOGORDO, NEW MEXICO

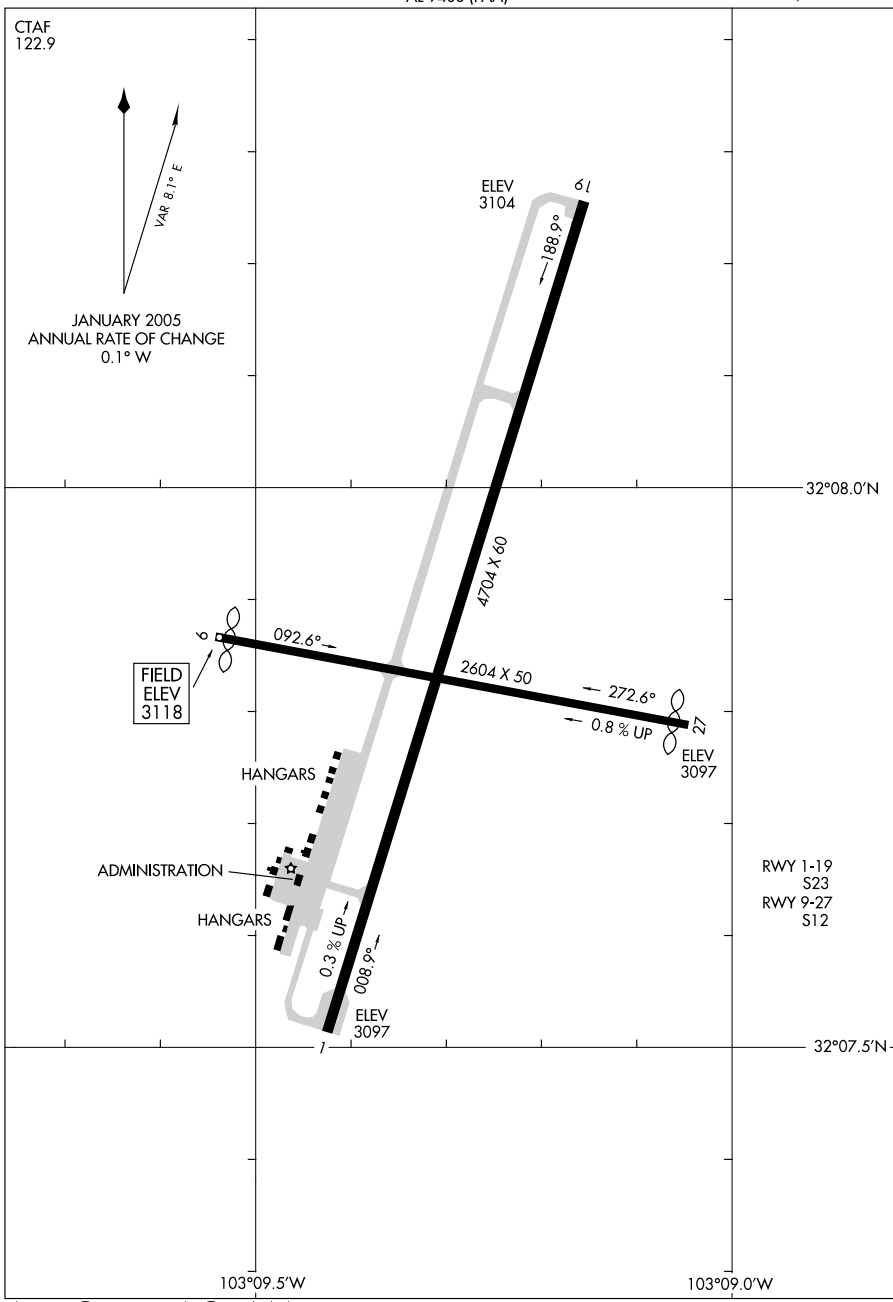
HOLLOMAN AFB (KHMN)

09295

AIRPORT DIAGRAM

JAL/LEA COUNTY (E26)
JAL, NEW MEXICO

AL-9408 (FAA)



AIRPORT DIAGRAM

09295

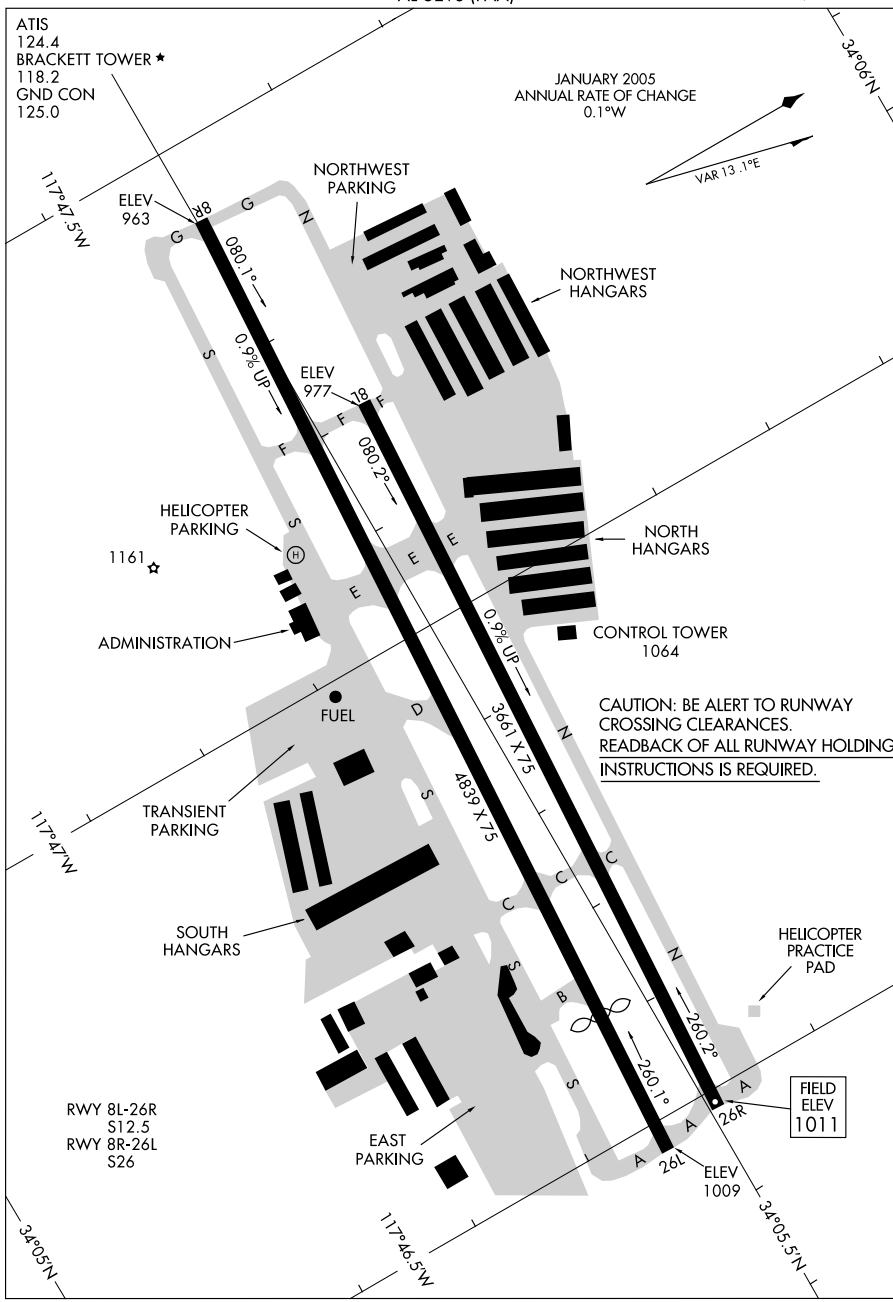
JAL, NEW MEXICO
JAL/ LEA COUNTY (E26)

09295

AIRPORT DIAGRAM

LA VERNE/BRACKETT FIELD (POC)
LA VERNE, CALIFORNIA

AL-5218 (FAA)



AIRPORT DIAGRAM

LA VERNE, CALIFORNIA
LA VERNE/BRACKETT FIELD (POC)

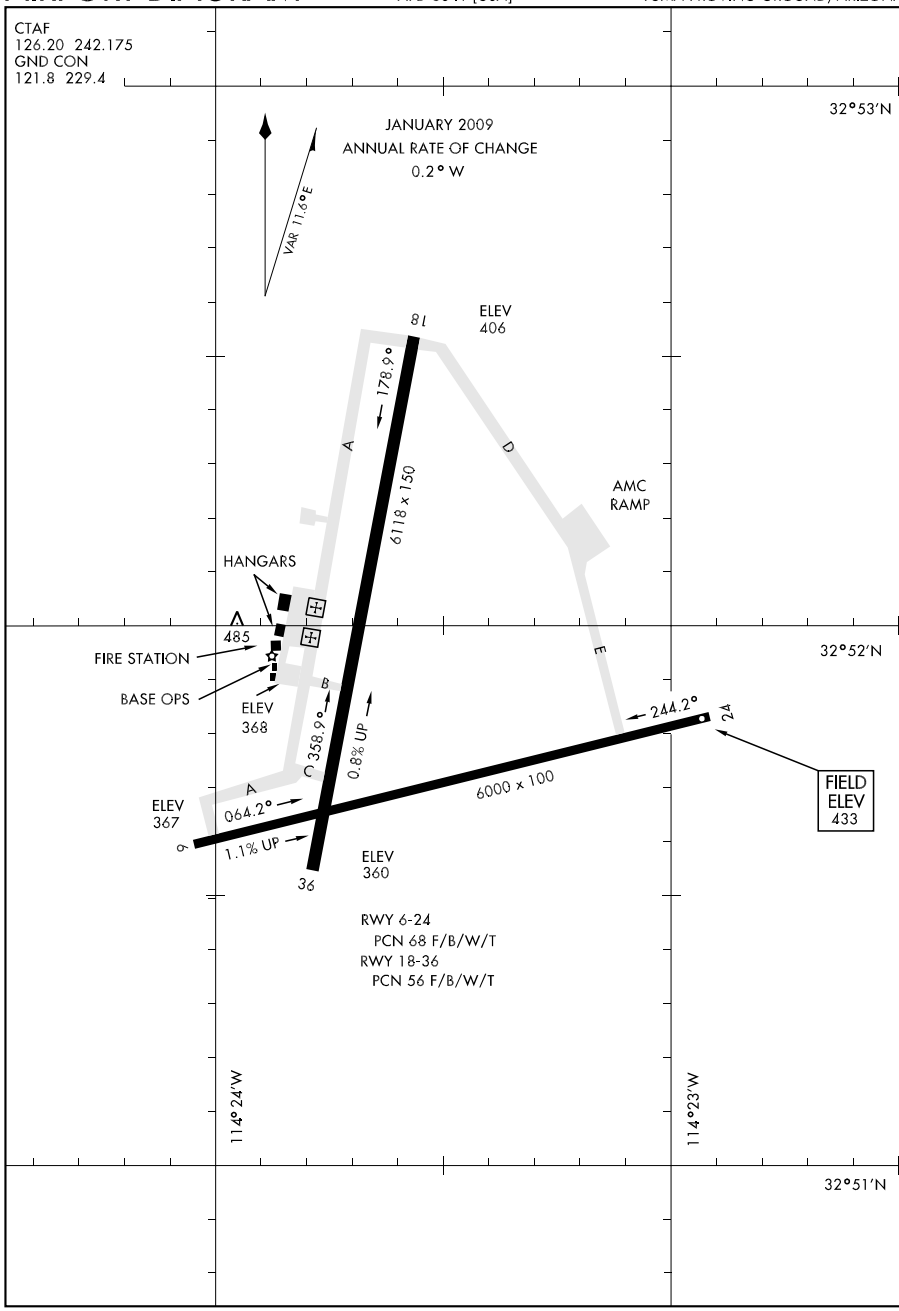
09295

09015

AIRPORT DIAGRAM

AFD-6341 [USA]

LAGUNA AAF (KLGF)
YUMA PROVING GROUND, ARIZONA



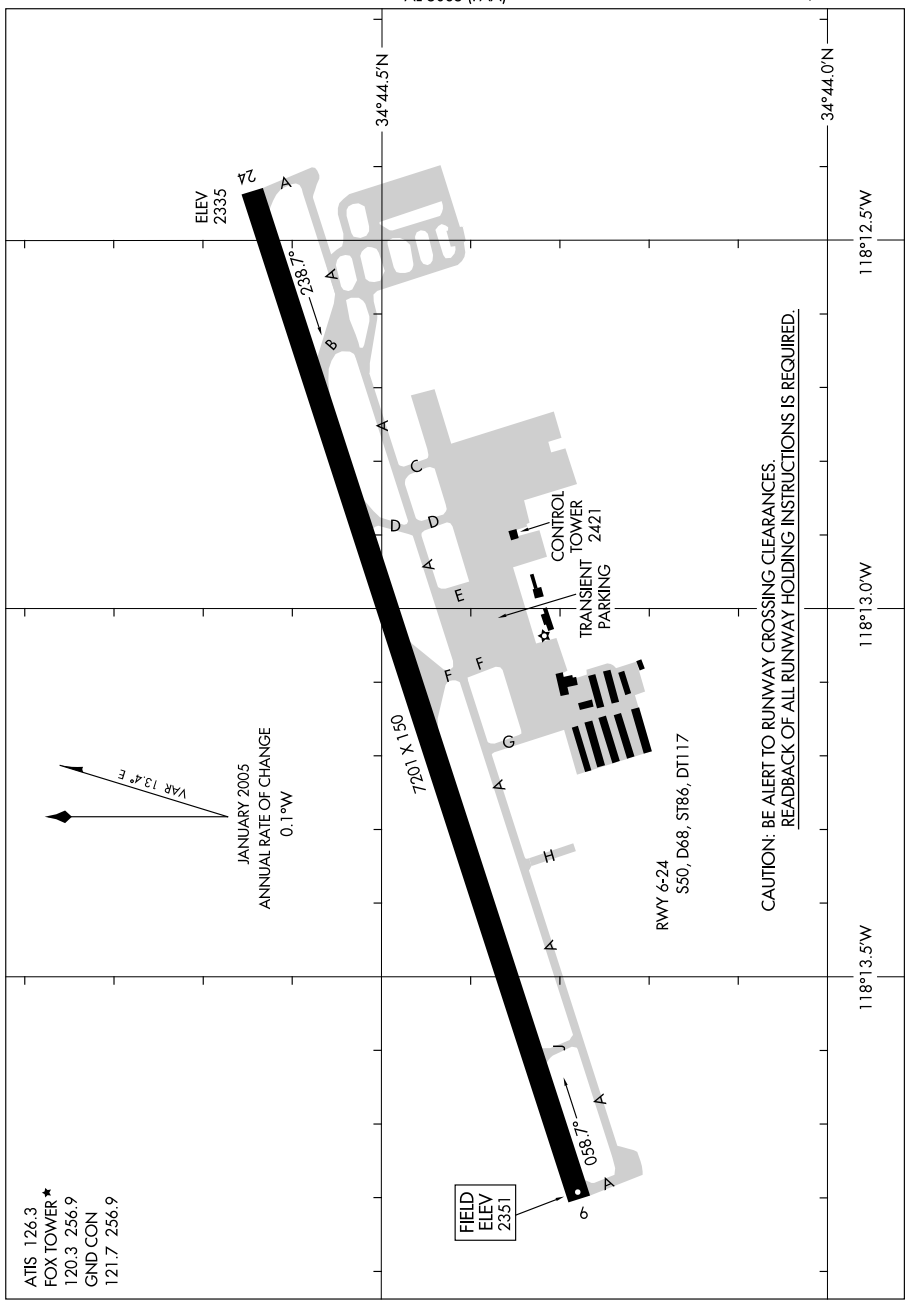
AIRPORT DIAGRAM

YUMA PROVING GROUND, ARIZONA
LAGUNA AAF (KLGF)

07186

AIRPORT DIAGRAM

LANCASTER/ GENERAL WILLIAM J. FOX AIRFIELD (WJF)
AL-5065 (FAA)
LANCASTER, CALIFORNIA



AIRPORT DIAGRAM

07186

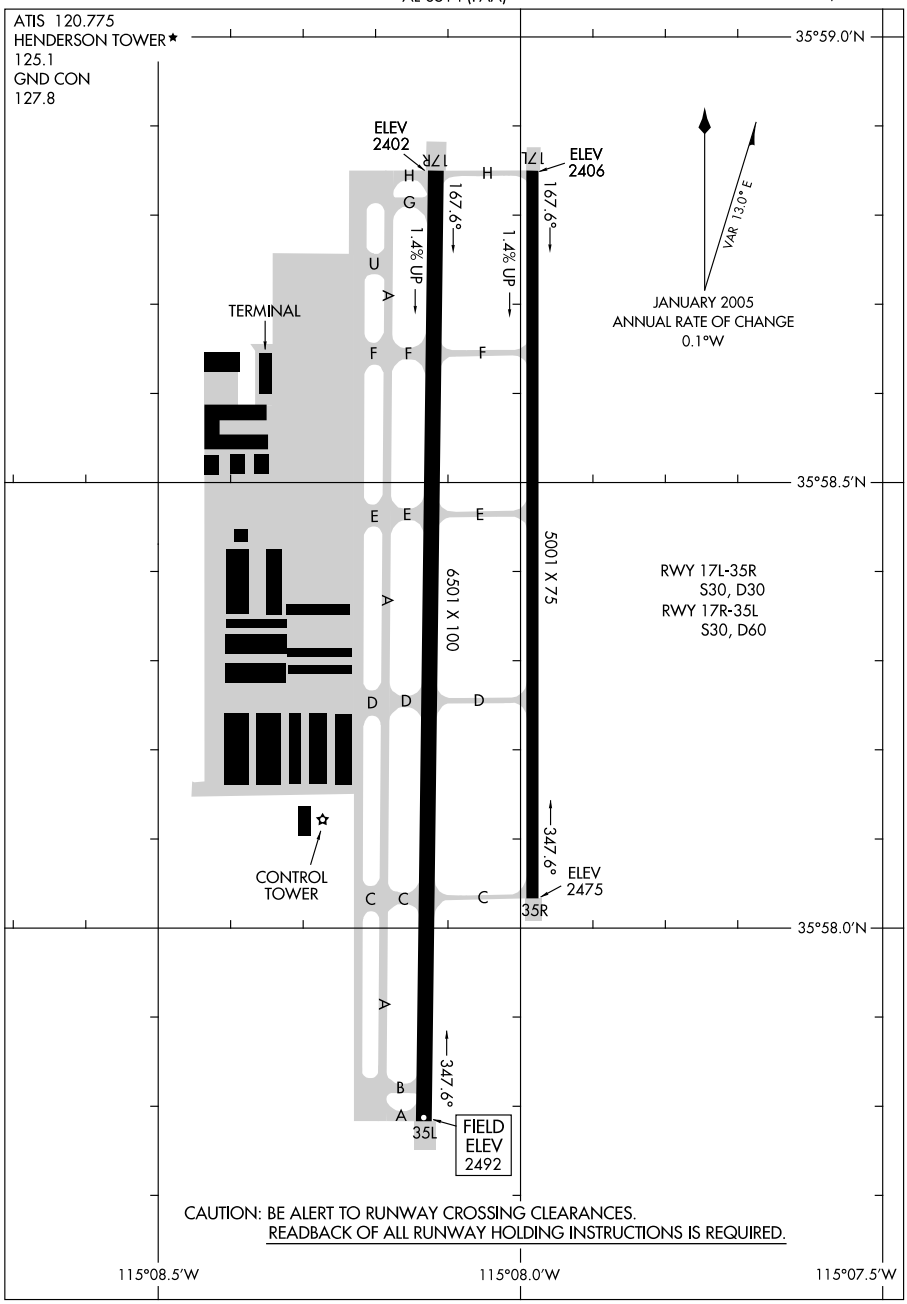
LANCASTER, CALIFORNIA
LANCASTER/ GENERAL WILLIAM J. FOX AIRFIELD (WJF)

08325

AIRPORT DIAGRAM

LAS VEGAS/HENDERSON EXECUTIVE (HND)
LAS VEGAS, NEVADA

AL-6514 (FAA)



AIRPORT DIAGRAM

08325

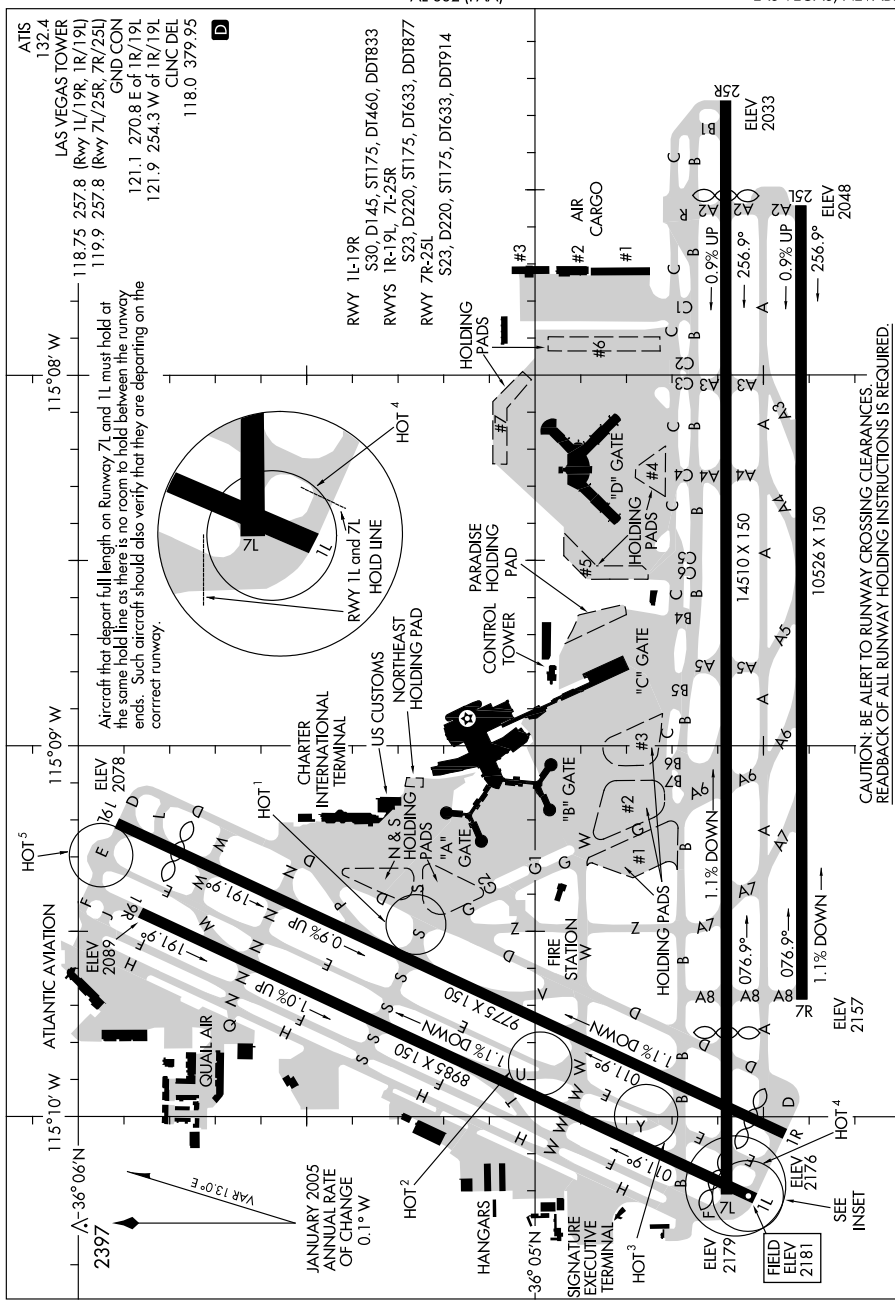
LAS VEGAS, NEVADA
LAS VEGAS/HENDERSON EXECUTIVE (HND)

09295

AIRPORT DIAGRAM

LAS VEGAS/McCARRAN INTL (LAS)
LAS VEGAS, NEVADA

AL-662 (FAA)



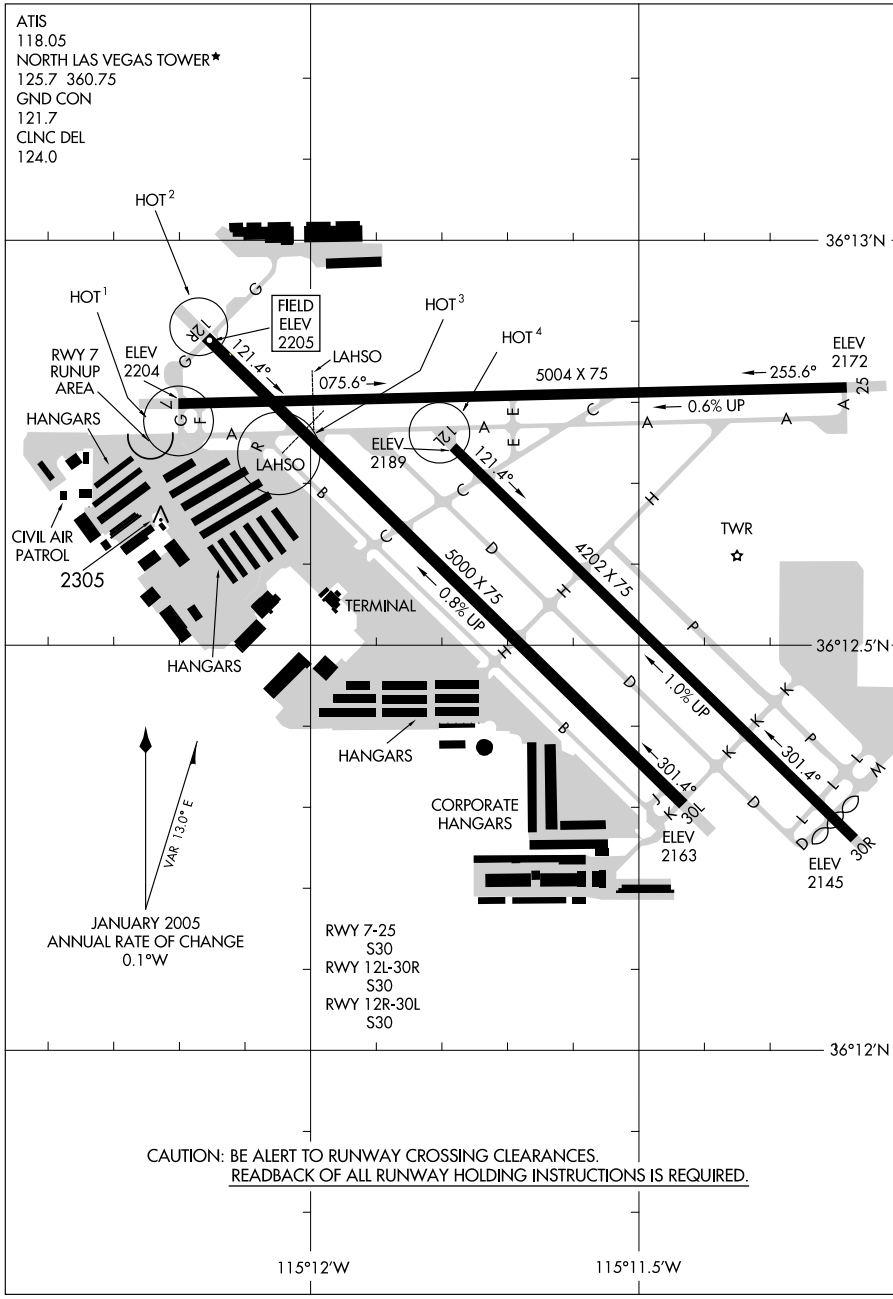
AIRPORT DIAGRAM
09295
LAS VEGAS, NEVADA
LAS VEGAS/McCARRAN INTL (LAS)

09295

AIRPORT DIAGRAM

AL-6970 (FAA)

LAS VEGAS/ NORTH LAS VEGAS (VGT)
LAS VEGAS, NEVADA



AIRPORT DIAGRAM

09295

LAS VEGAS, NEVADA
LAS VEGAS/ NORTH LAS VEGAS (VGT)

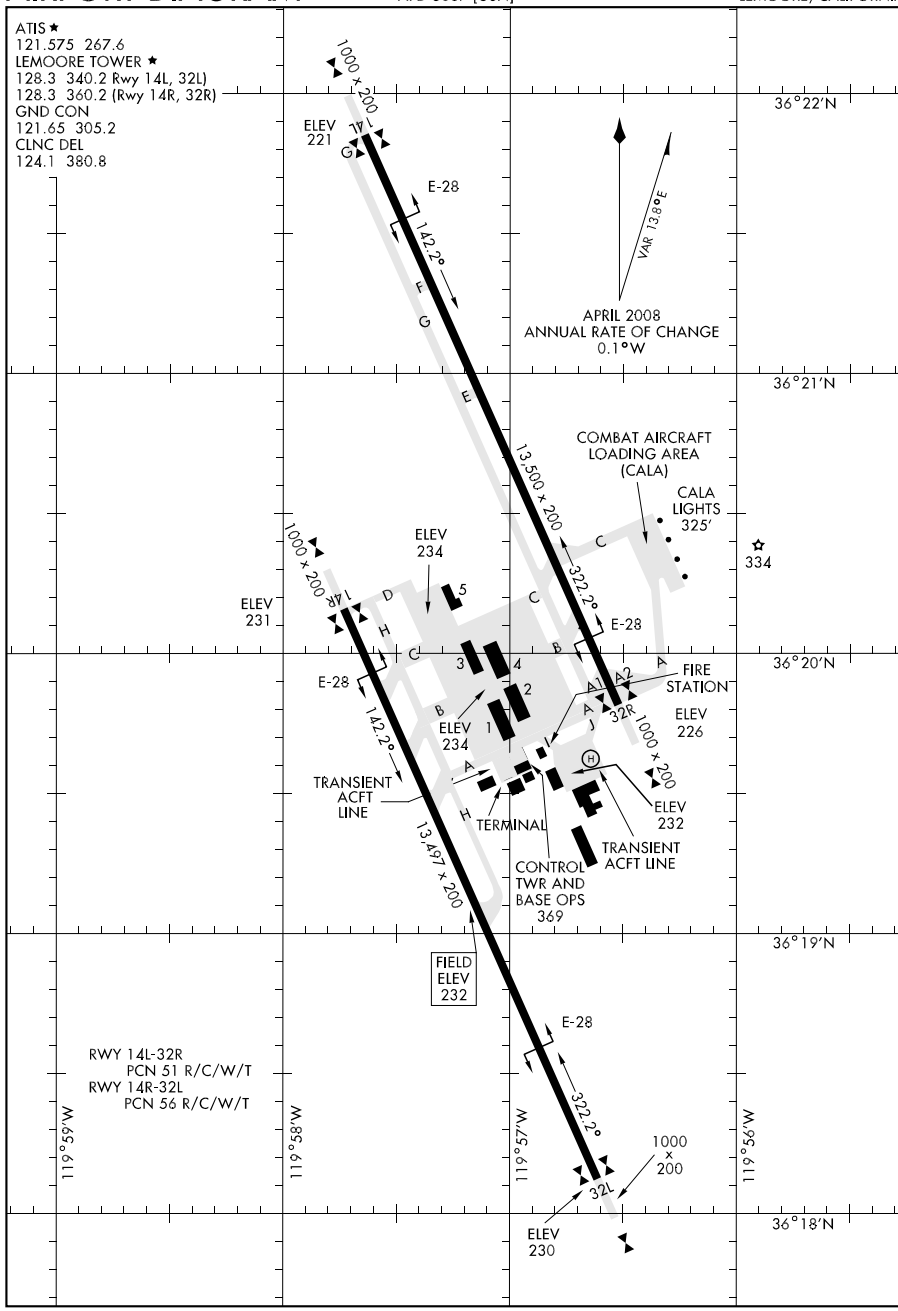
08101

AIRPORT DIAGRAM

LEMOORE NAS (REEVES FIELD) (KNLC)

AFD-5067 [USN]

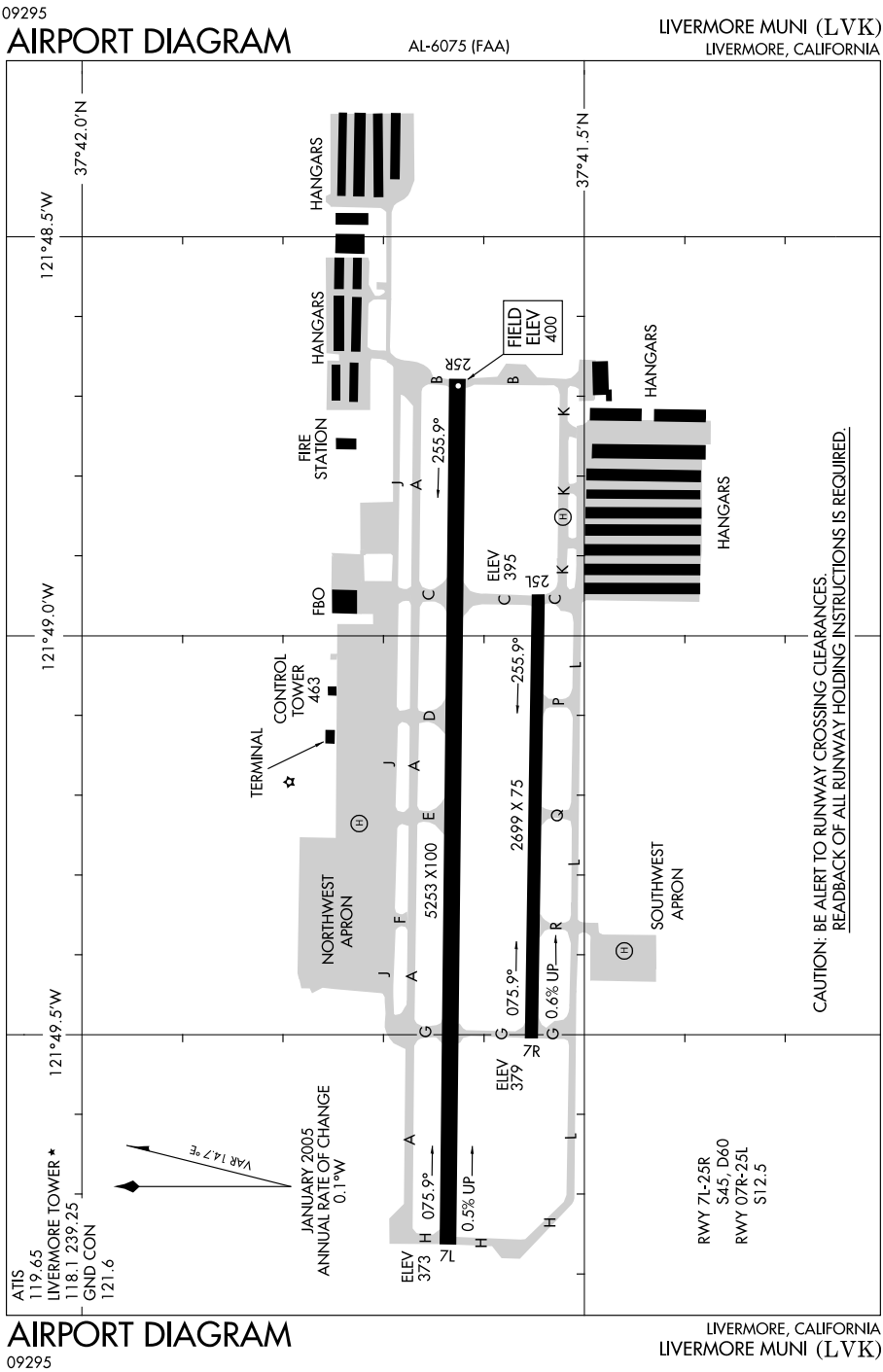
LEMOORE, CALIFORNIA



AIRPORT DIAGRAM

LEMOORE, CALIFORNIA

LEMOORE NAS (REEVES FIELD) (KNLC)


09295
AIRPORT DIAGRAM
AL-6075 (FAA)
LIVERMORE MUNI (LVK)
LIVERMORE, CALIFORNIA
37°42.0'N
37°41.5'N
121°48.5'W
121°49.0'W
121°49.5'W
HANGARS
HANGARS
HANGARS
HANGARS
FIRE STATION
FBO
FIELD ELEV 400
ELEV 395
ELEV 379
ELEV 373
25R
25L
7R
7L
255.9°
255.9°
075.9°
075.9°
0.6% UP
0.5% UP
CONTROL TOWER 463
TERMINAL
NORTHWEST APRON
SOUTHWEST APRON
5253 X100
2699 X 75
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
ATIS 119.65
LIVERMORE TOWER ★ 118.1 239.25
GND CON 121.6
VAR 14.7°E
JANUARY 2005
ANNUAL RATE OF CHANGE 0.1°W
RWY 7L-25R S45, D60
RWY 07R-25L S12.5
AIRPORT DIAGRAM
09295
LIVERMORE, CALIFORNIA
LIVERMORE MUNI (LVK)

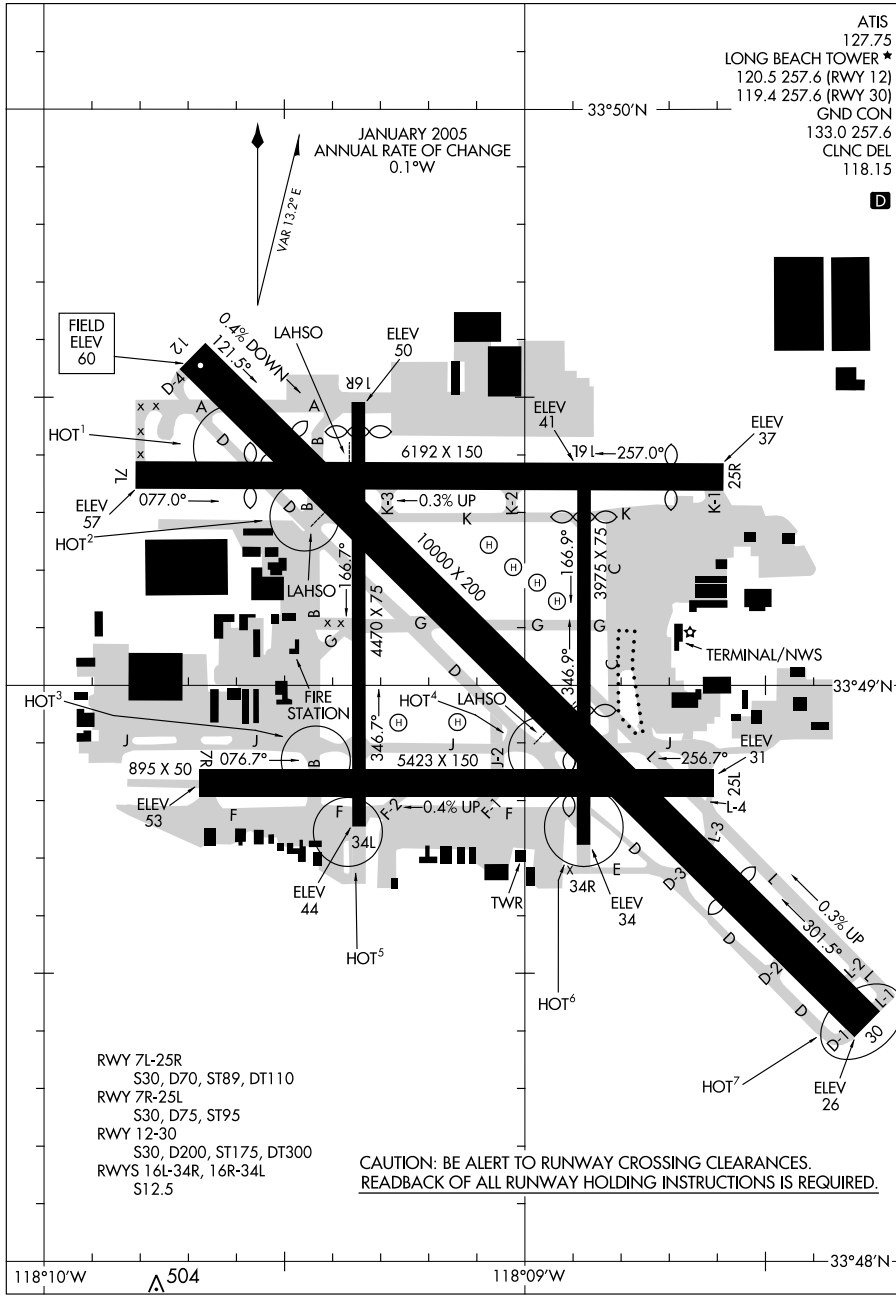
10098

AIRPORT DIAGRAM

AL-236 (FAA)

LONG BEACH (DAUGHERTY FIELD) (LGB)

LONG BEACH, CALIFORNIA



AIRPORT DIAGRAM

10098

LONG BEACH, CALIFORNIA

LONG BEACH (DAUGHERTY FIELD) (LGB)

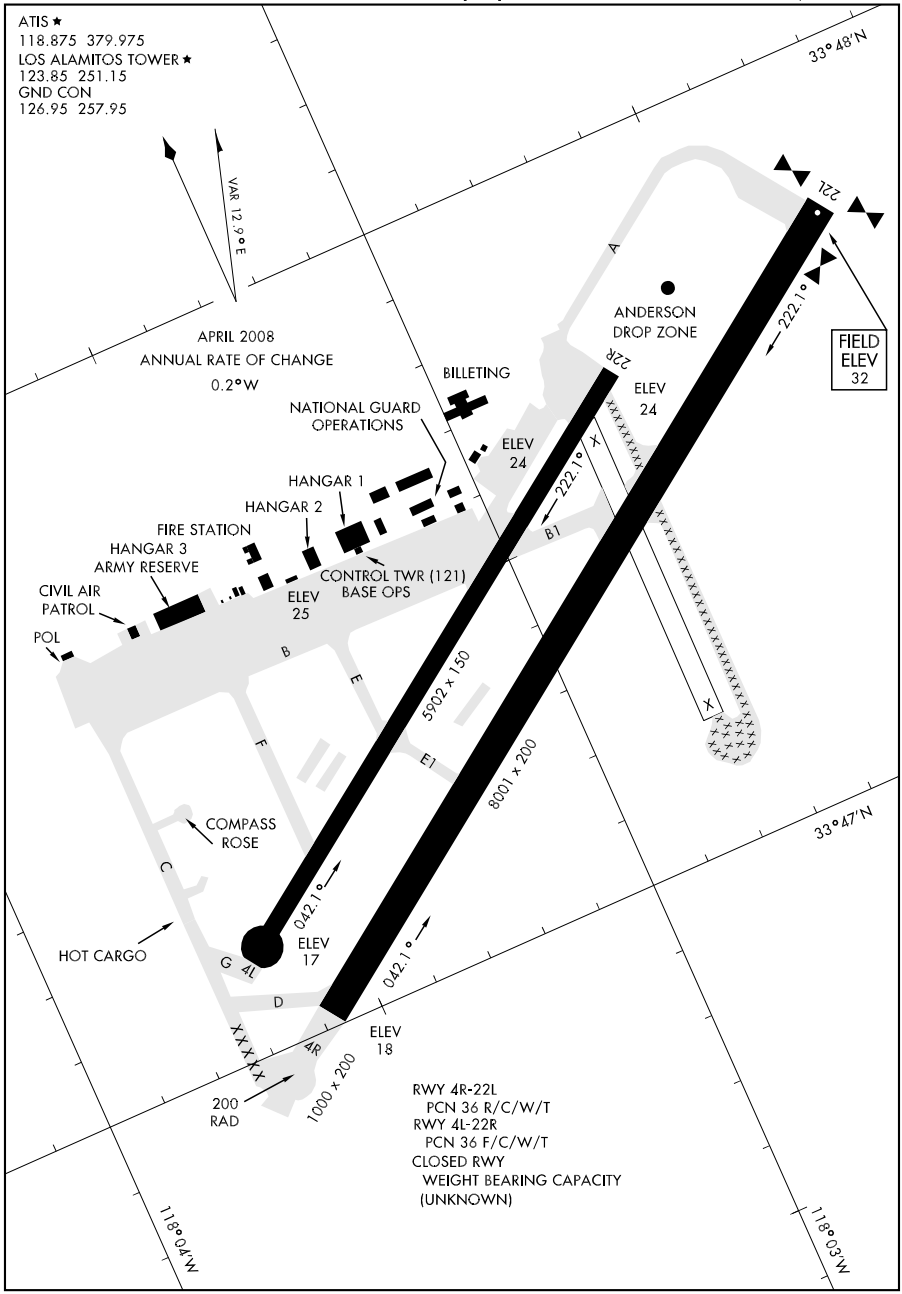
08101

AIRPORT DIAGRAM

LOS ALAMITOS AAF (KSLI)

AFD-953 [USA]

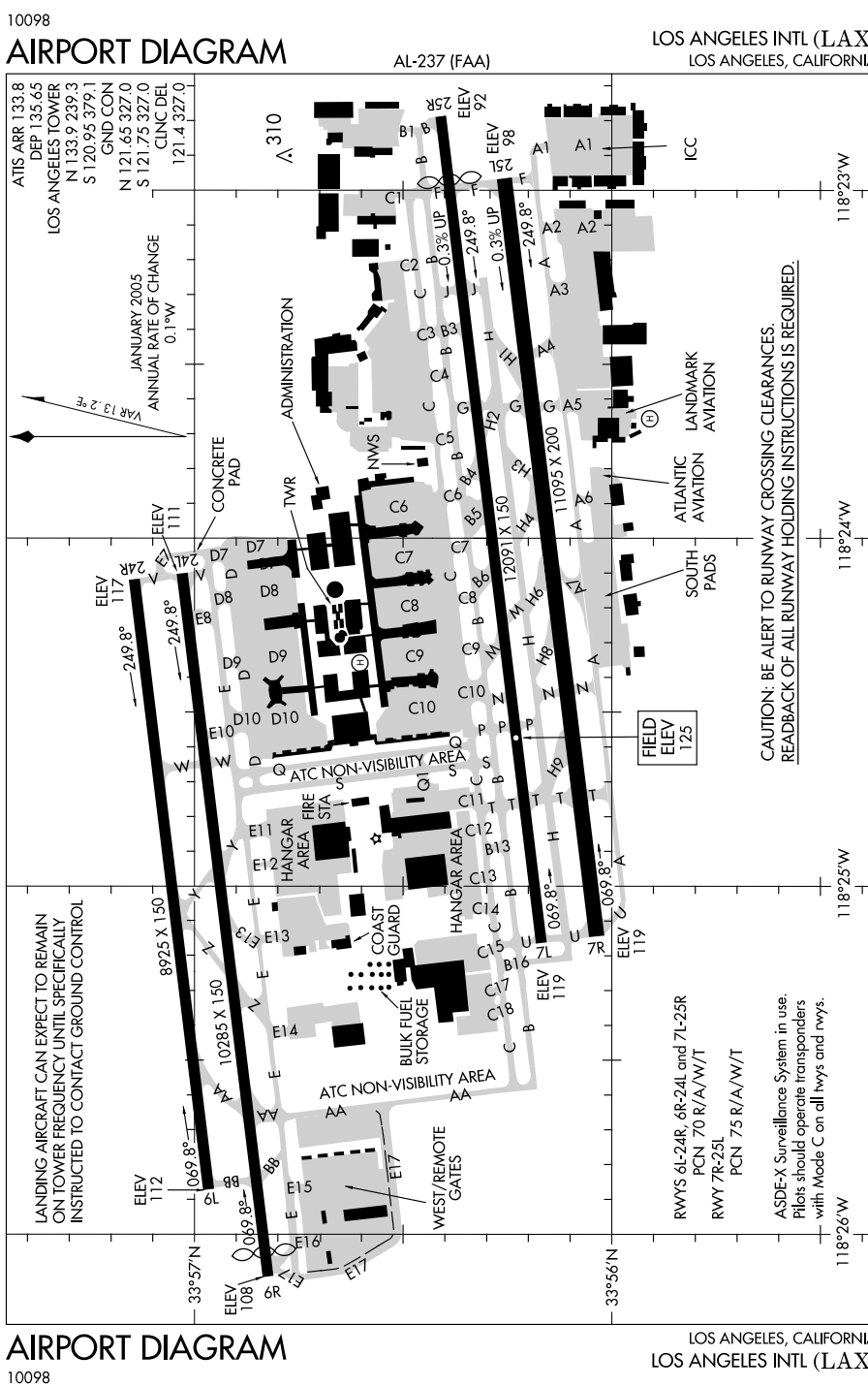
LOS ALAMITOS, CALIFORNIA



AIRPORT DIAGRAM

LOS ALAMITOS, CALIFORNIA

LOS ALAMITOS AAF (KSLI)

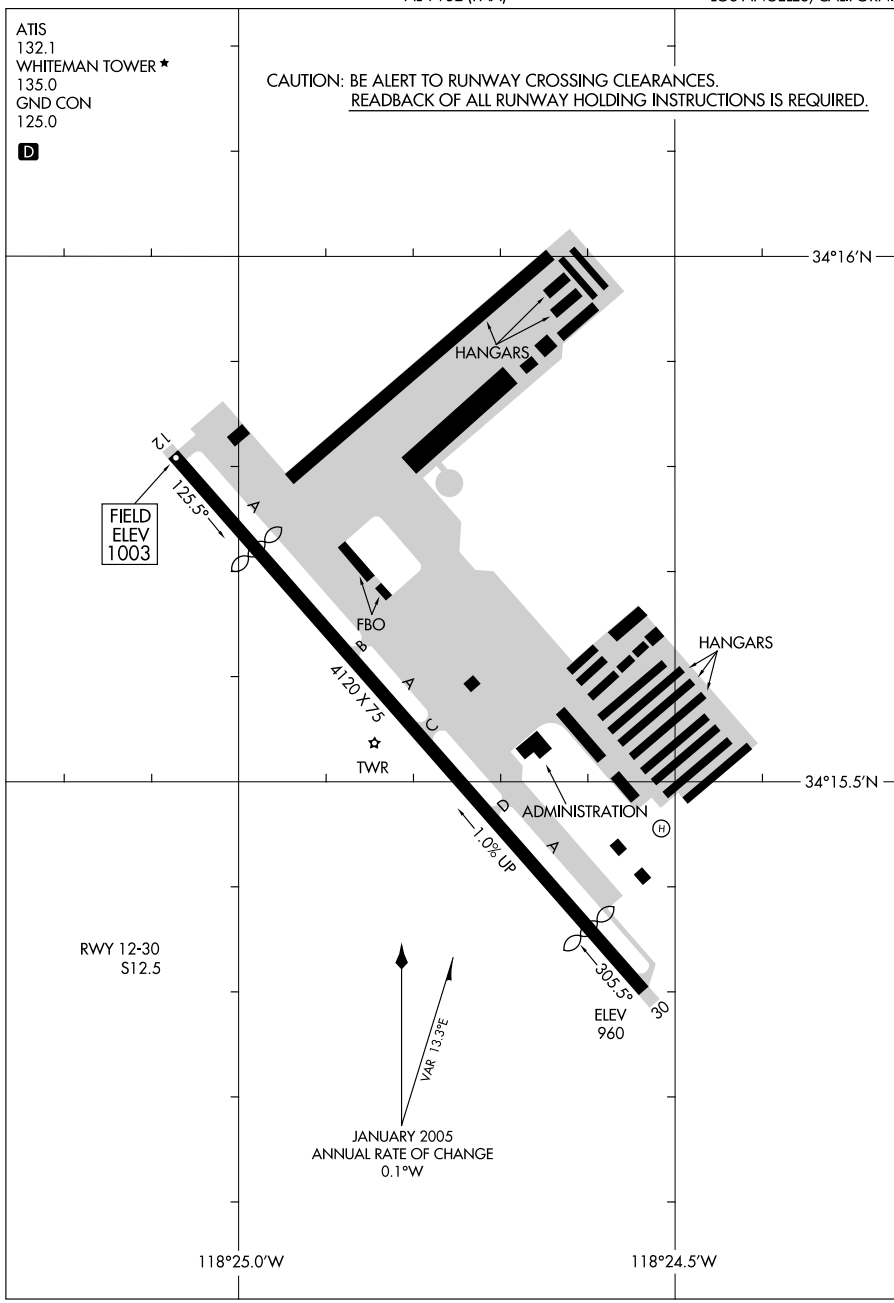

10098
AIRPORT DIAGRAM
AL-237 (FAA)
LOS ANGELES INTL (LAX)
LOS ANGELES, CALIFORNIA
ATIS ARR 133.8
DEP 135.65
LOS ANGELES TOWER
N 133.9 239.3
S 120.95 379.1
GND CON
N 121.65 327.0
S 121.75 327.0
CLNC DEL
121.4 327.0
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
VAR 13.2°E
ADMINISTRATION
TWR
NWS
CONCRETE PAD
ELEV 111
ELEV 117
ELEV 92
ELEV 98
ELEV 112
ELEV 108
ELEV 119
249.8°
069.8°
0.3% UP
11095 X 200
12091 X 150
8925 X 150
10285 X 150
ICC
LANDMARK AVIATION
ATLANTIC AVIATION
SOUTH PADS
FIELD ELEV 125
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
ATC NON-VISIBILITY AREA
HANGAR AREA
FIRE STA
COAST GUARD
BULK FUEL STORAGE
WEST/REMOTE GATES
LANDING AIRCRAFT CAN EXPECT TO REMAIN ON TOWER FREQUENCY UNTIL SPECIFICALLY INSTRUCTED TO CONTACT GROUND CONTROL
RWYS 6L-24R, 6R-24L and 7L-25R
PCN 70 R/A/W/T
RWY 7R-25L
PCN 75 R/A/W/T
ASDE-X Surveillance System in use.
Pilots should operate transponders with Mode C on all twys and rwys.
118°23'W
118°24'W
118°25'W
118°26'W
33°57'N
33°56'N
AIRPORT DIAGRAM
10098
LOS ANGELES, CALIFORNIA
LOS ANGELES INTL (LAX)

09295

AIRPORT DIAGRAM

AL-9132 (FAA)

LOS ANGELES/ WHITEMAN (WHP)
LOS ANGELES, CALIFORNIA



AIRPORT DIAGRAM

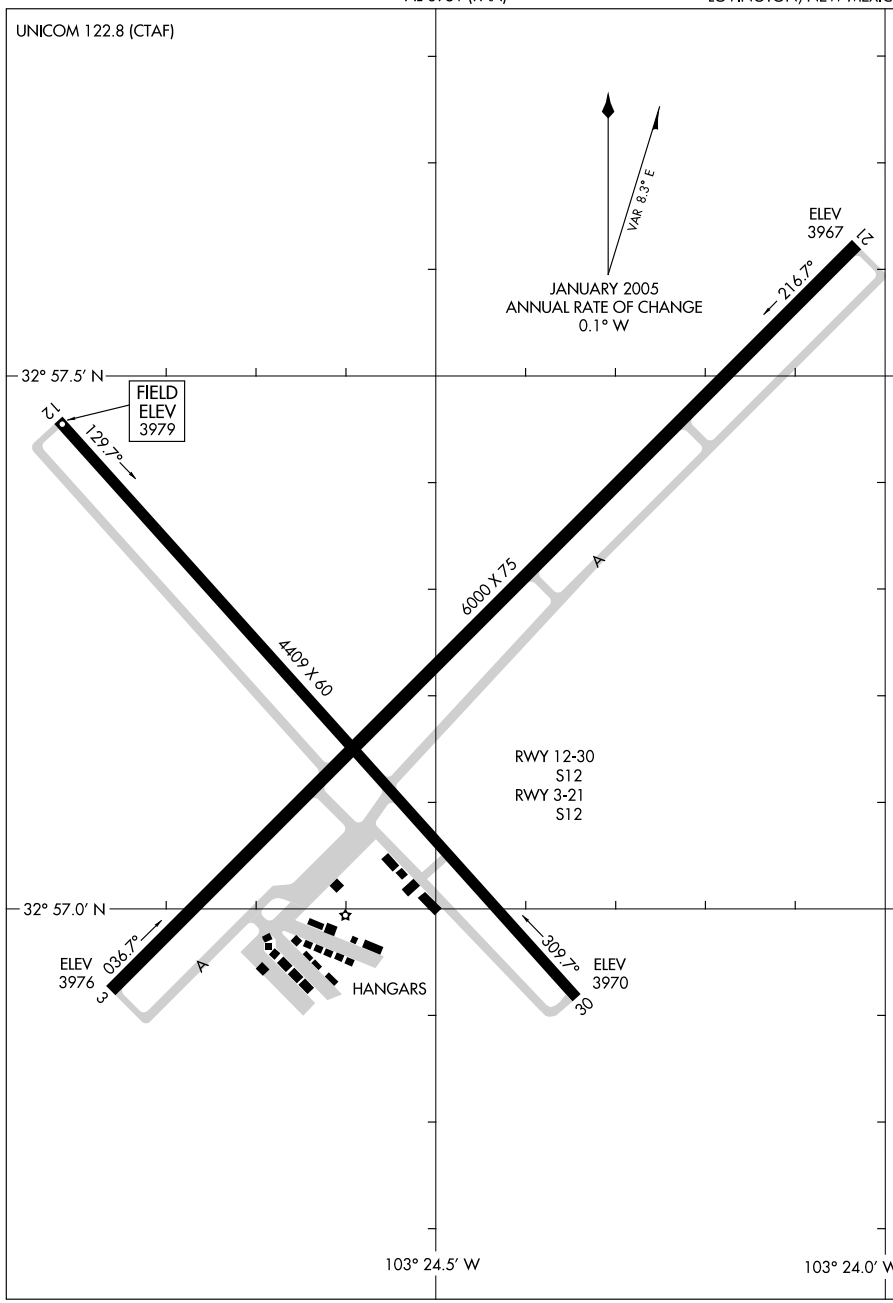
09295

LOS ANGELES, CALIFORNIA
LOS ANGELES/ WHITEMAN (WHP)

06271

AIRPORT DIAGRAM

LOVINGTON/LEA COUNTY-ZIP FRANKLIN MEMORIAL (E06)
AL-6951 (FAA)
LOVINGTON, NEW MEXICO



AIRPORT DIAGRAM

06271

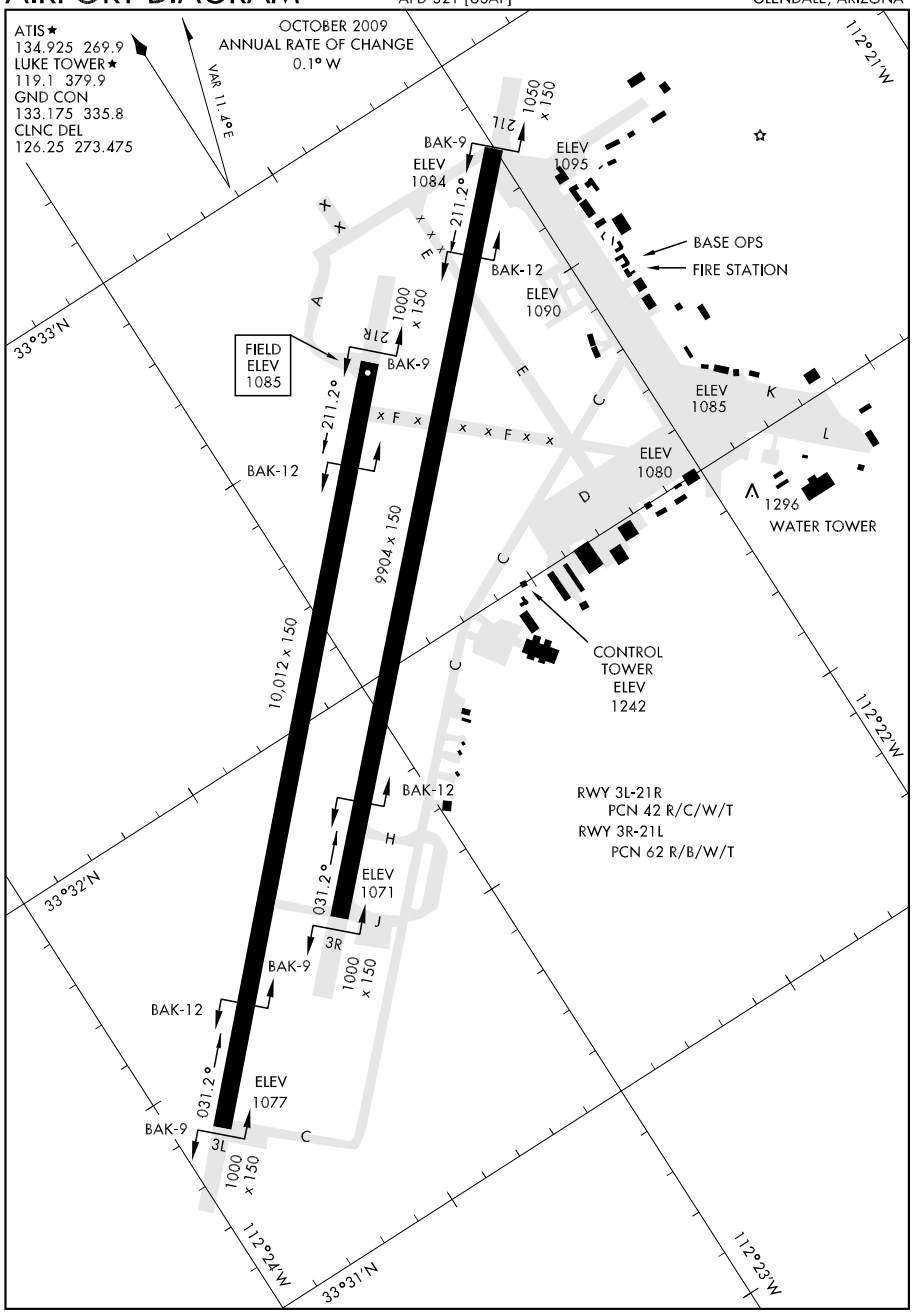
LOVINGTON, NEW MEXICO
LOVINGTON/LEA COUNTY-ZIP FRANKLIN MEMORIAL (E06)

09295

AIRPORT DIAGRAM

LUKE AFB (KLUF)
GLENDALE, ARIZONA

AFD-321 [USAF]



AIRPORT DIAGRAM

GLENDALE, ARIZONA
LUKE AFB (KLUF)

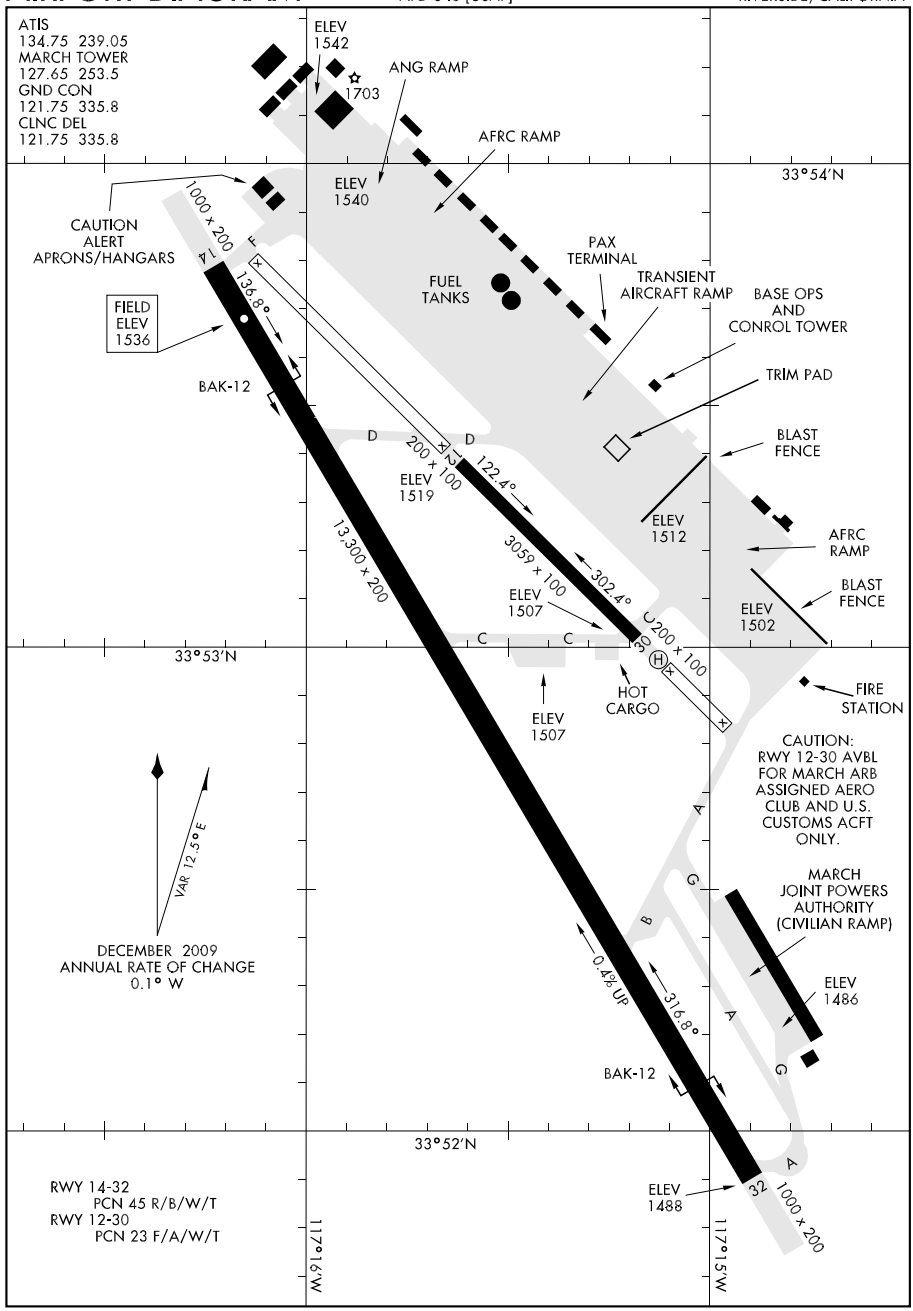
09351

AIRPORT DIAGRAM

MARCH ARB (KRIV)

AFD-348 [USAF]

RIVERSIDE, CALIFORNIA



AIRPORT DIAGRAM

RIVERSIDE, CALIFORNIA

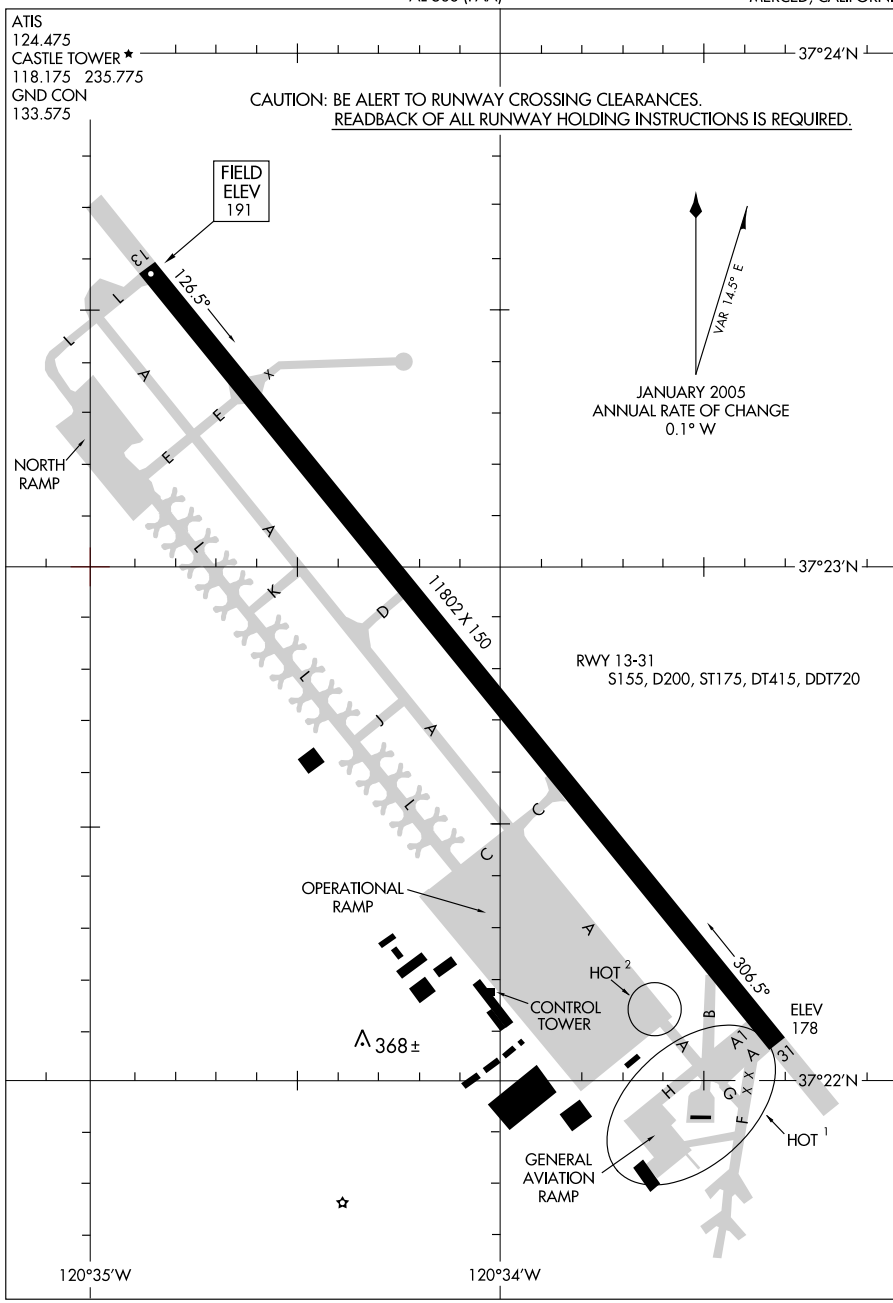
MARCH ARB (KRIV)

09295

AIRPORT DIAGRAM

AL-568 (FAA)

MERCED/CASTLE (MER)
MERCED, CALIFORNIA



AIRPORT DIAGRAM

09295

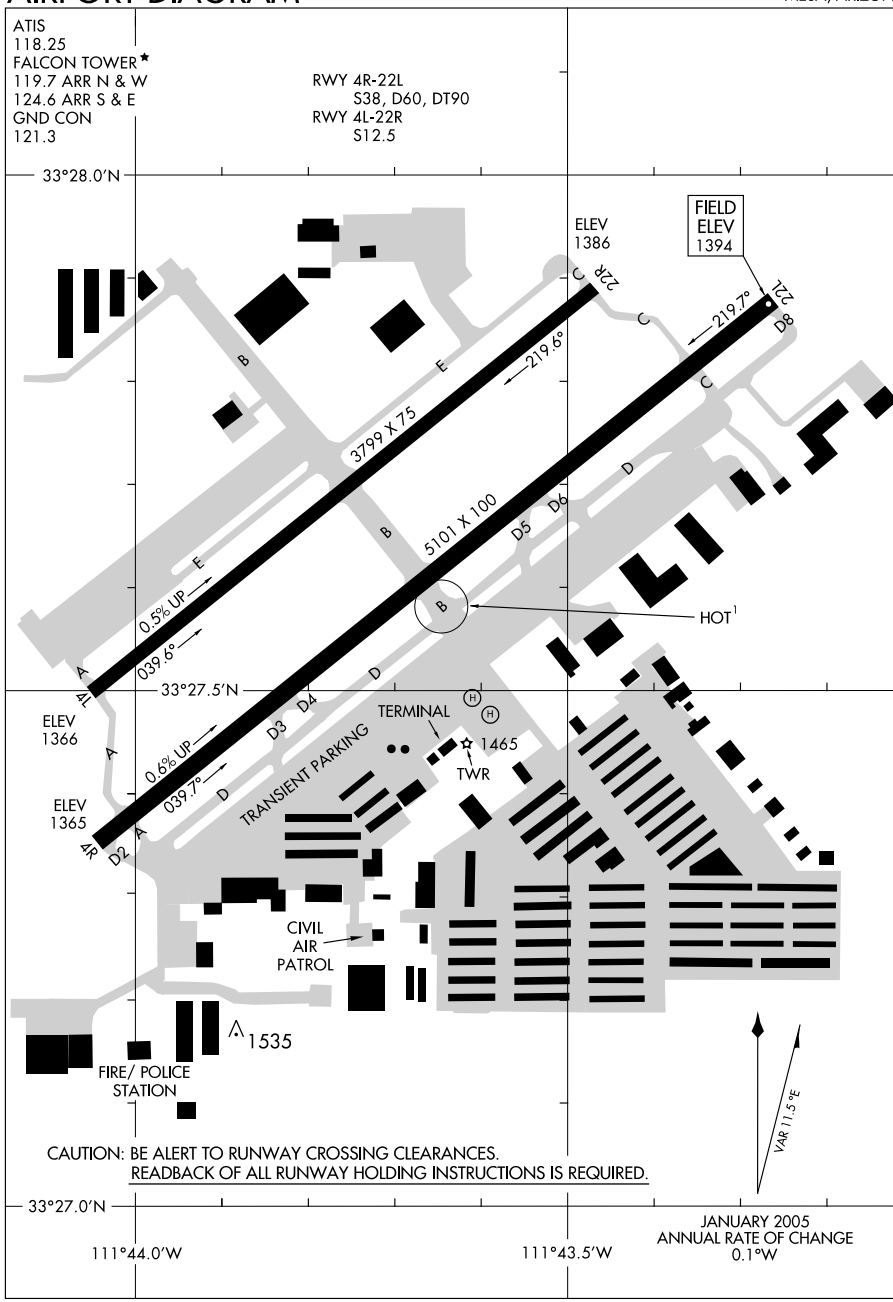
MERCED, CALIFORNIA
MERCED/CASTLE (MER)

10042

AIRPORT DIAGRAM

AL-6647 (FAA)

MESA/ FALCON FIELD (FFZ)
MESA, ARIZONA



AIRPORT DIAGRAM

10042

MESA, ARIZONA
MESA/ FALCON FIELD (FFZ)

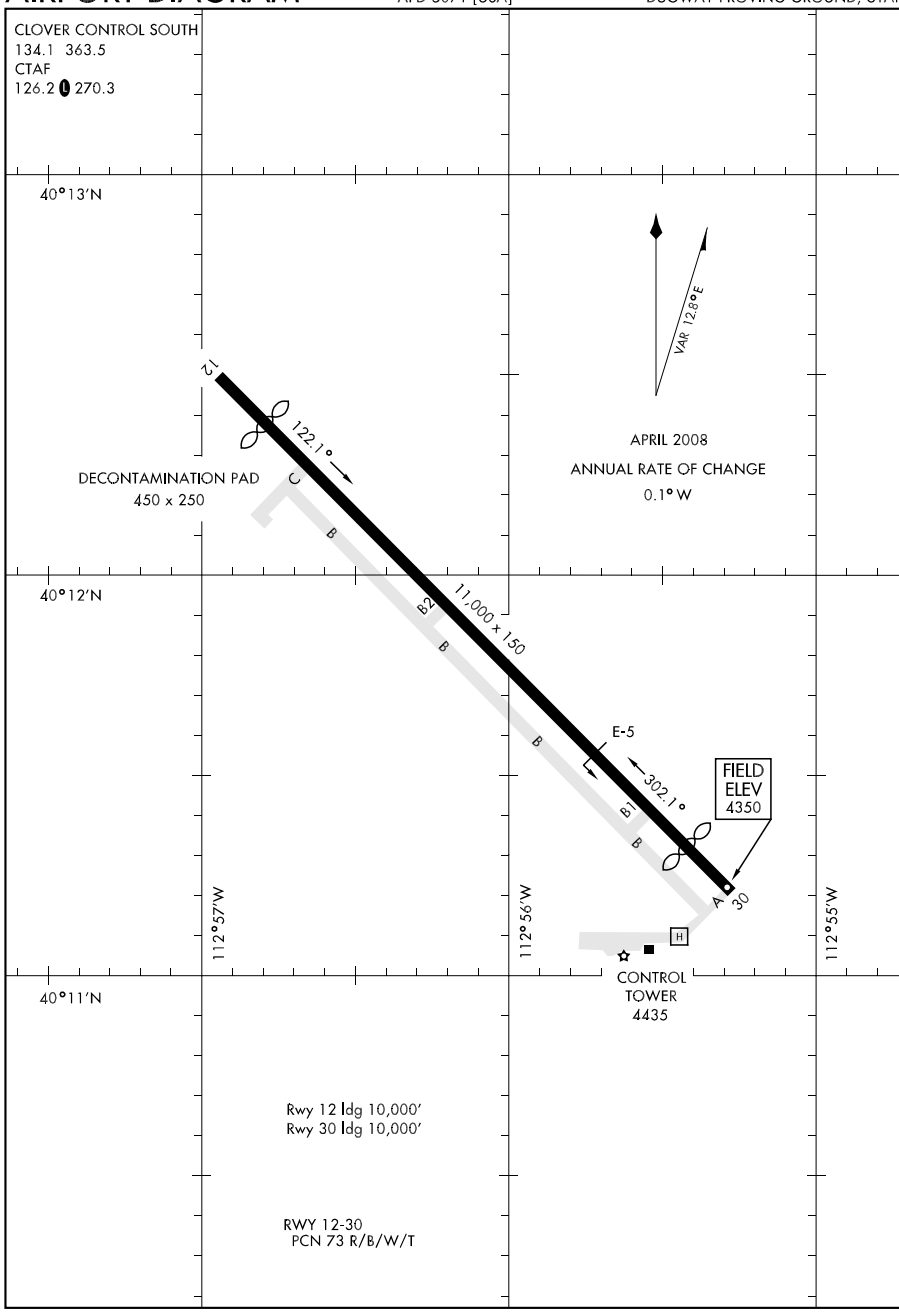
08101

AIRPORT DIAGRAM

AFD-5071 [USA]

MICHAEL AAF (KDPG)

DUGWAY PROVING GROUND, UTAH



AIRPORT DIAGRAM

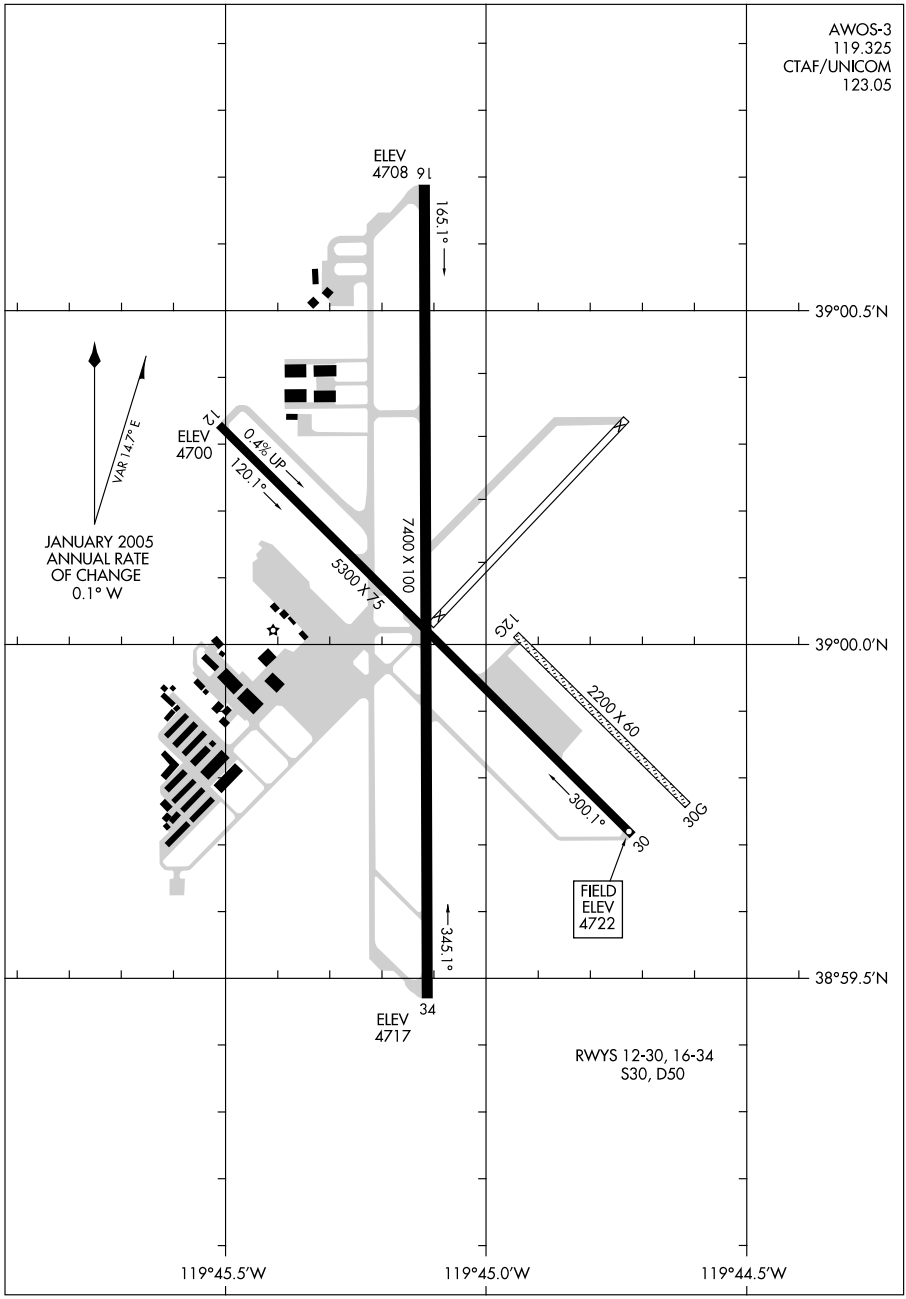
DUGWAY PROVING GROUND, UTAH
MICHAEL AAF (KDPG)

10042

AIRPORT DIAGRAM

AL-9430 (FAA)

MINDEN/ MINDEN-TAHOE (MEV)
MINDEN, NEVADA



AIRPORT DIAGRAM

10042

MINDEN, NEVADA
MINDEN/ MINDEN-TAHOE (MEV)

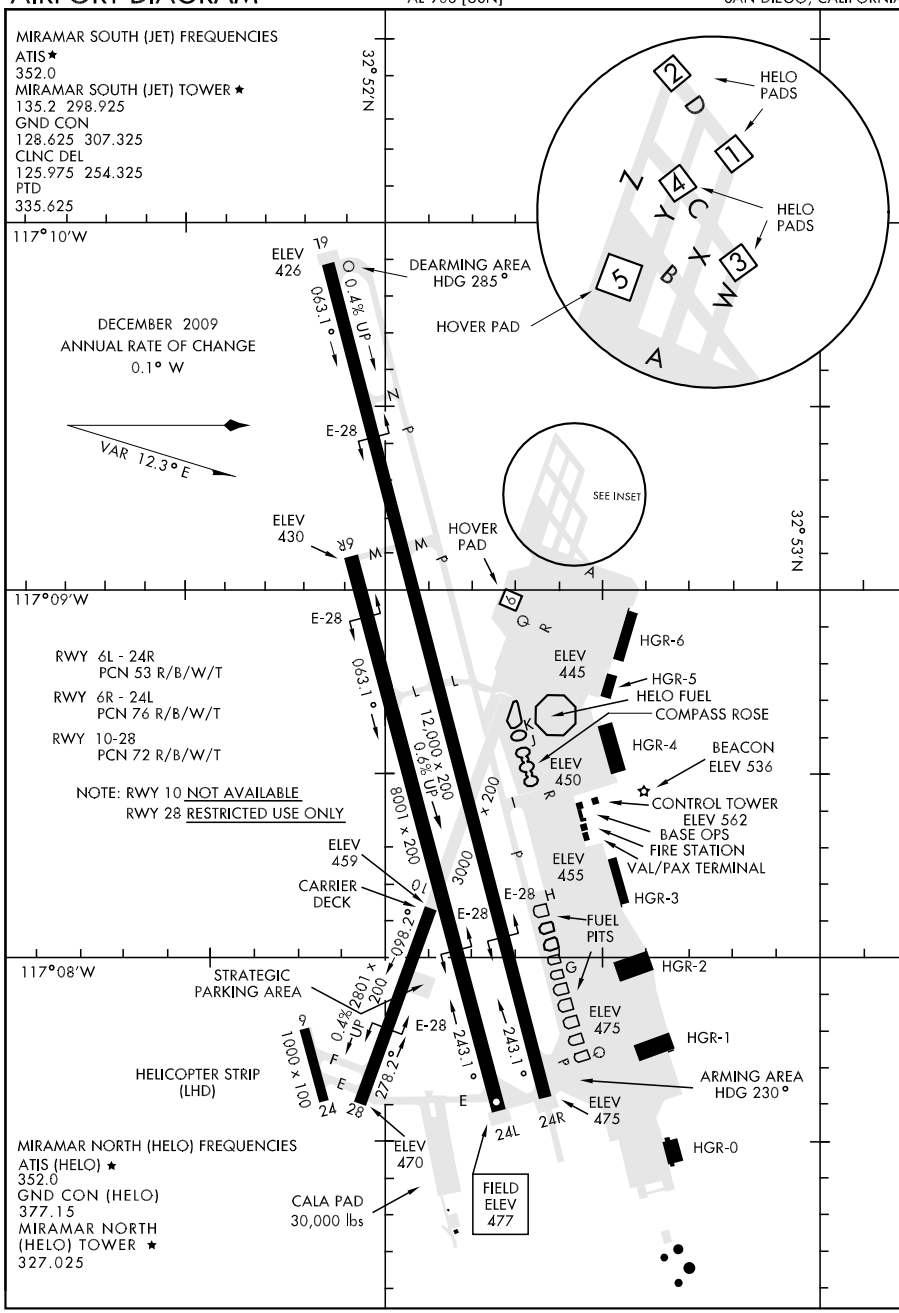
09351

MIRAMAR MCAS (MITSCHER FLD) (KNKX)

AIRPORT DIAGRAM

AL-903 [USN]

SAN DIEGO, CALIFORNIA



AIRPORT DIAGRAM

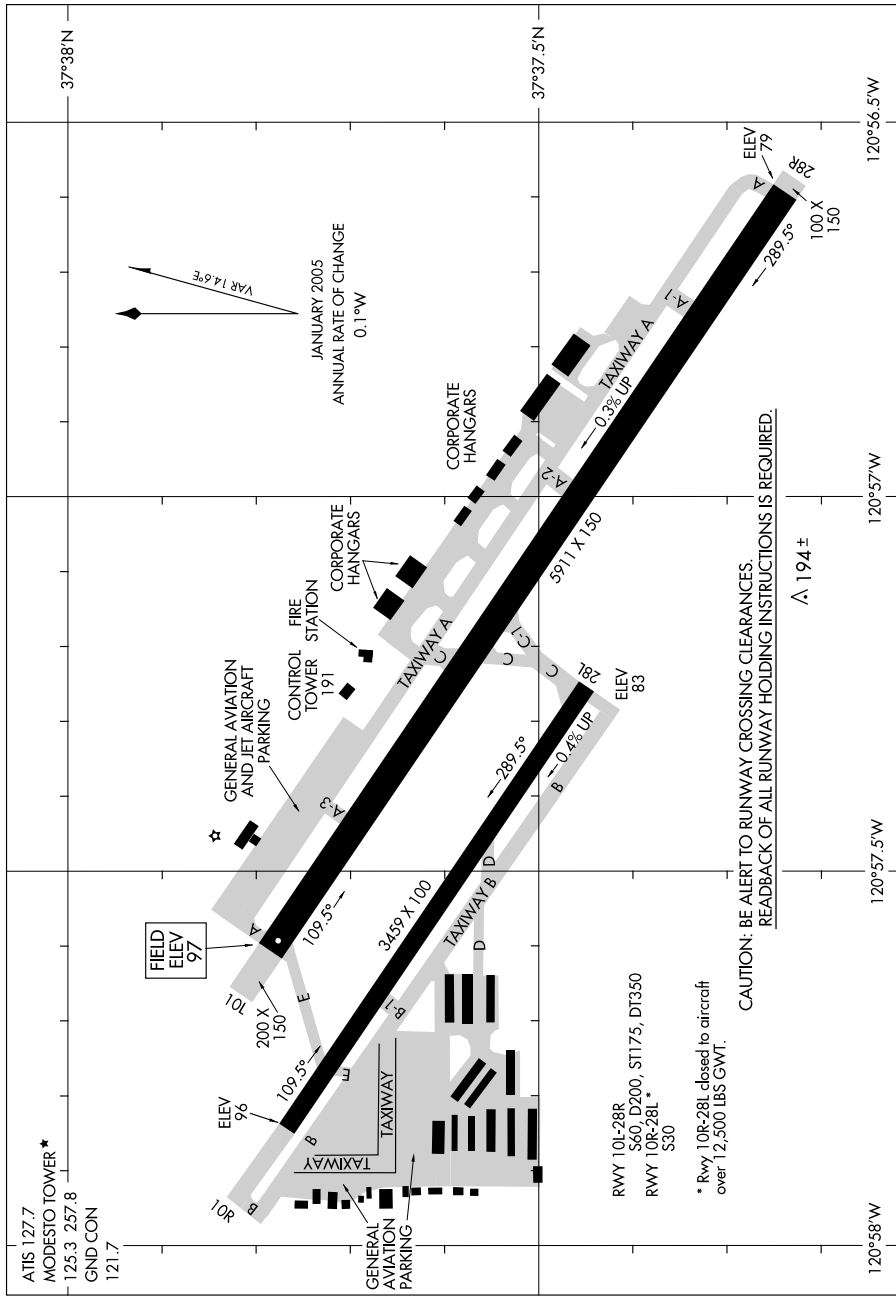
SAN DIEGO, CALIFORNIA

MIRAMAR MCAS (MITSCHER FLD) (KNKX)

08045

AIRPORT DIAGRAM

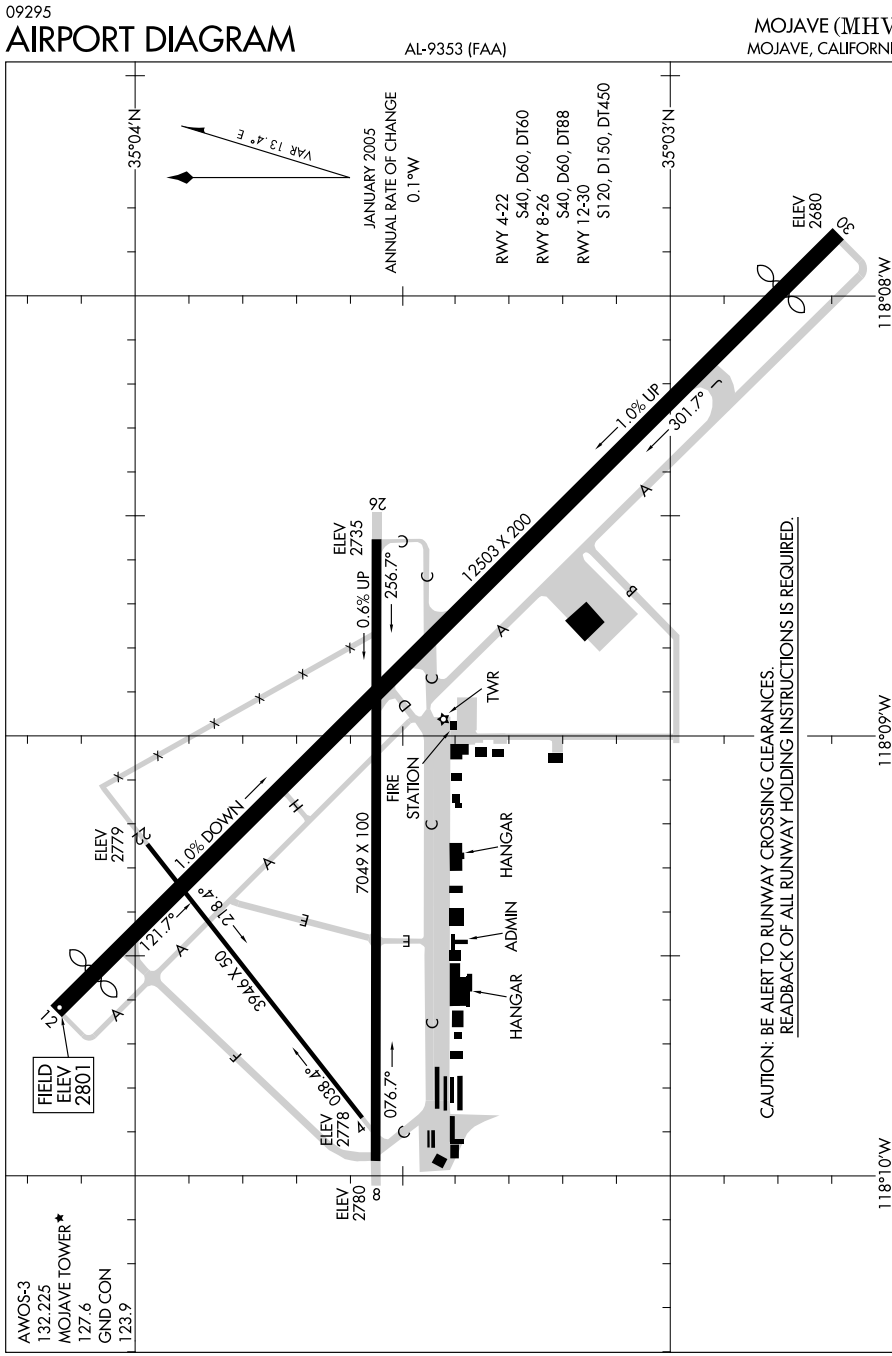
MODESTO CITY-COUNTY-HARRY SHAM FIELD (MOD)
AL-643 (FAA)
MODESTO, CALIFORNIA

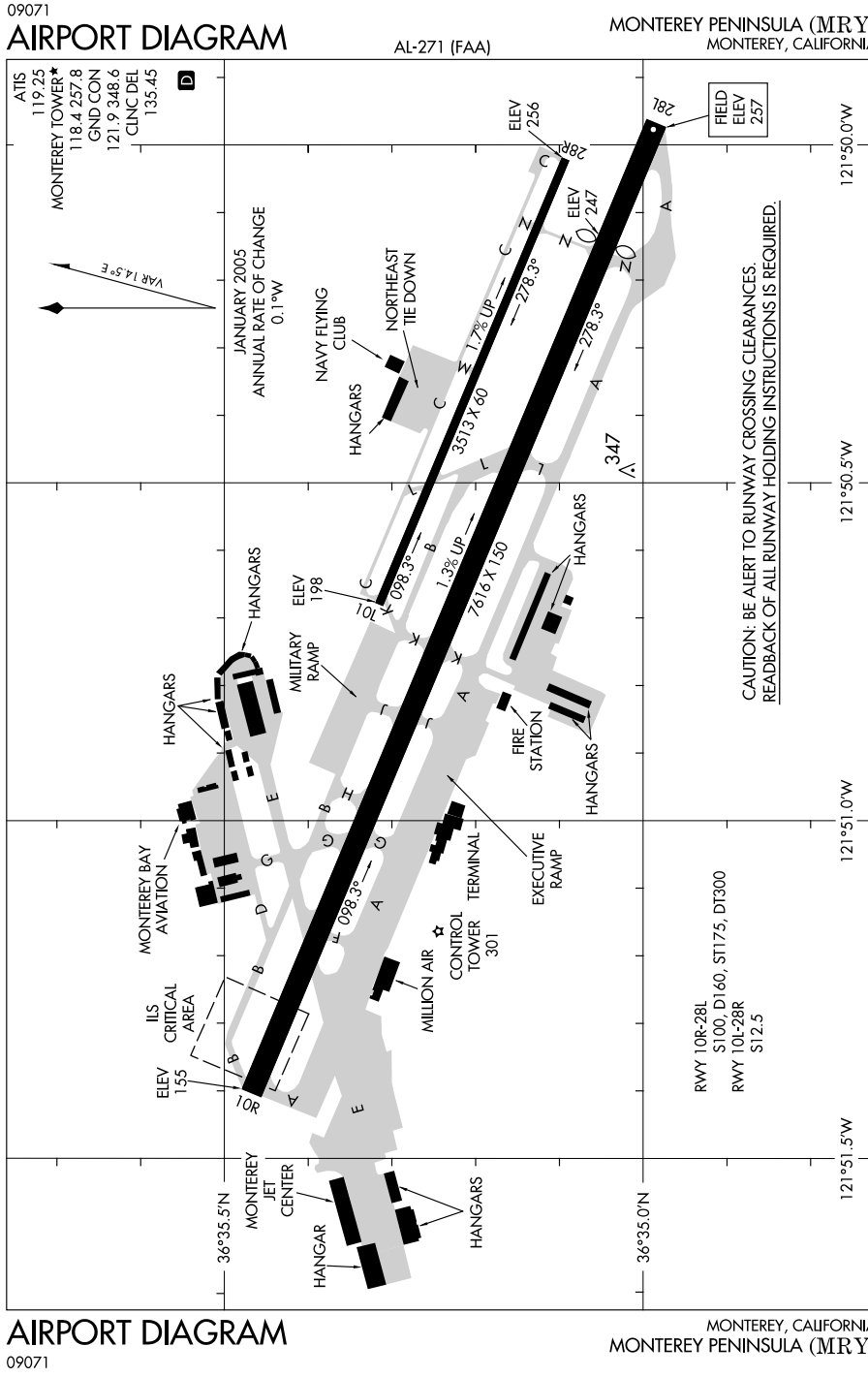


AIRPORT DIAGRAM

08045

MODESTO, CALIFORNIA
MODESTO CITY-COUNTY-HARRY SHAM FIELD (MOD)

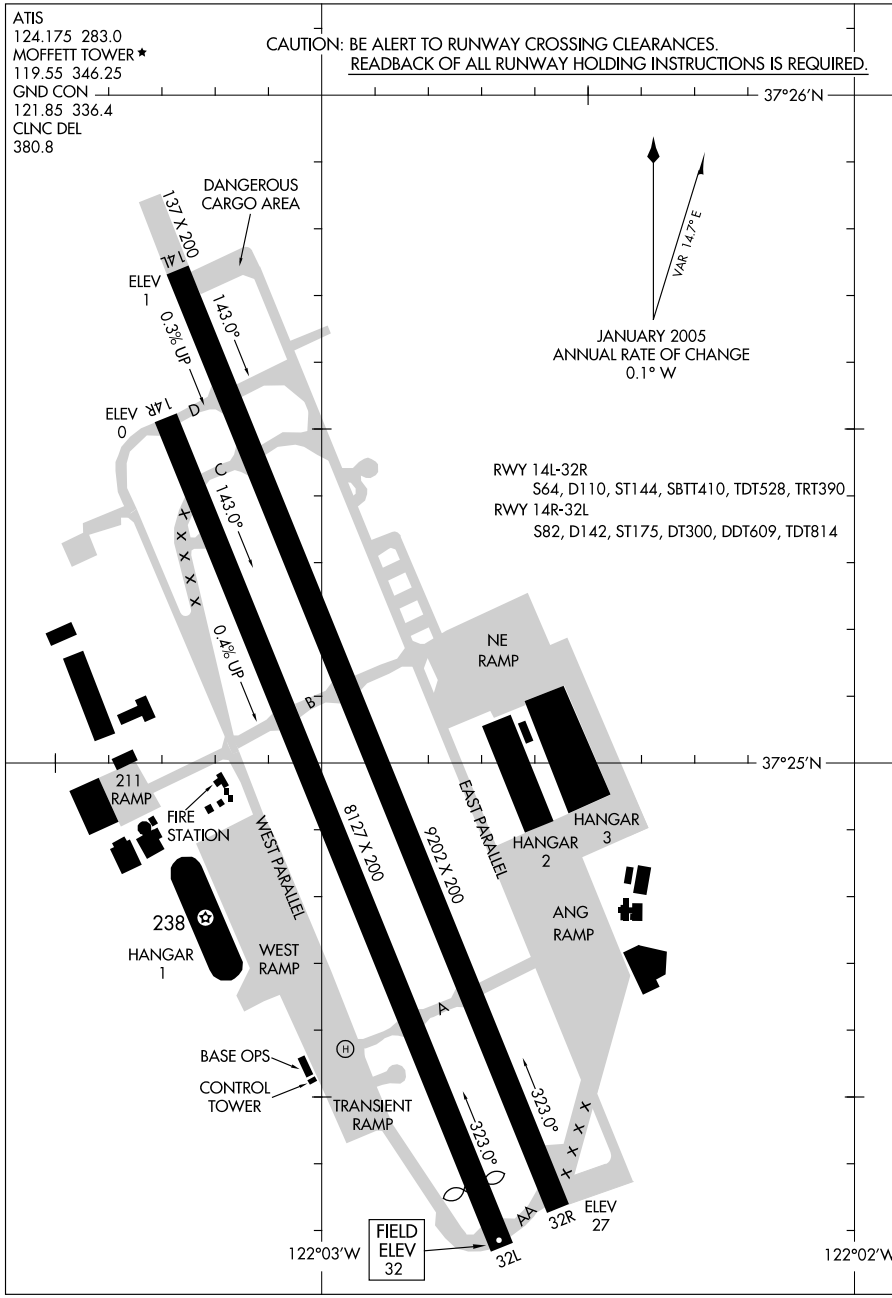

09295
AIRPORT DIAGRAM
AL-9353 (FAA)
MOJAVE (MHV)
MOJAVE, CALIFORNIA
35°04'N
35°03'N
118°08'W
118°09'W
118°10'W
VAR 13.4° E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
RWY 4-22
S40, D60, DT60
RWY 8-26
S40, D60, DT88
RWY 12-30
S120, D150, DT450
ELEV
2680
1.0% UP
301.7°
12503 X 200
ELEV
2735
0.6% UP
256.7°
26
22
1.0% DOWN
121.7°
218.4°
3946 X 50
059.4°
ELEV
2779
ELEV
2778
076.7°
7049 X 100
ELEV
2780
FIELD
ELEV
2801
FIRE
STATION
TWR
HANGAR
ADMIN
HANGAR
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
AWOS-3
132.225
MOJAVE TOWER★
127.6
GND CON
123.9
AIRPORT DIAGRAM
09295
MOJAVE, CALIFORNIA
MOJAVE (MHV)


09071
AIRPORT DIAGRAM
AL-271 (FAA)
MONTEREY PENINSULA (MRY)
MONTEREY, CALIFORNIA
ATIS 119.25
MONTEREY TOWER★ 118.4 257.8
GND CON 121.9 348.6
CLNC DEL 135.45
D
VAR 14.5°E
JANUARY 2005
ANNUAL RATE OF CHANGE 0.1°W
NAVY FLYING CLUB
NORTHEAST TIE DOWN
HANGARS
ELEV 256
28R
28L
FIELD ELEV 257
ELEV 247
1.7% UP
278.3°
3513 X 60
347
1.3% UP
098.3°
7616 X 150
ELEV 198
10L
10R
HANGARS
MILITARY RAMP
FIRE STATION
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
MONTEREY BAY AVIATION
ILS CRITICAL AREA
ELEV 1.55
MILLION AIR
CONTROL TOWER 301
TERMINAL
EXECUTIVE RAMP
RWY 10R-28L S100, D160, ST175, DT300
RWY 10L-28R S12.5
MONTEREY JET CENTER
HANGAR
36°35.5'N
36°35.0'N
121°50.0'W
121°50.5'W
121°51.0'W
121°51.5'W
AIRPORT DIAGRAM
09071
MONTEREY, CALIFORNIA
MONTEREY PENINSULA (MRY)

09071

AIRPORT DIAGRAM

MOUNTAIN VIEW/MOFFETT FEDERAL AIRFIELD (NUQ)
MOUNTAIN VIEW, CALIFORNIA
AL-410 (FAA)



AIRPORT DIAGRAM

MOUNTAIN VIEW, CALIFORNIA
MOUNTAIN VIEW/MOFFETT FEDERAL AIRFIELD (NUQ)

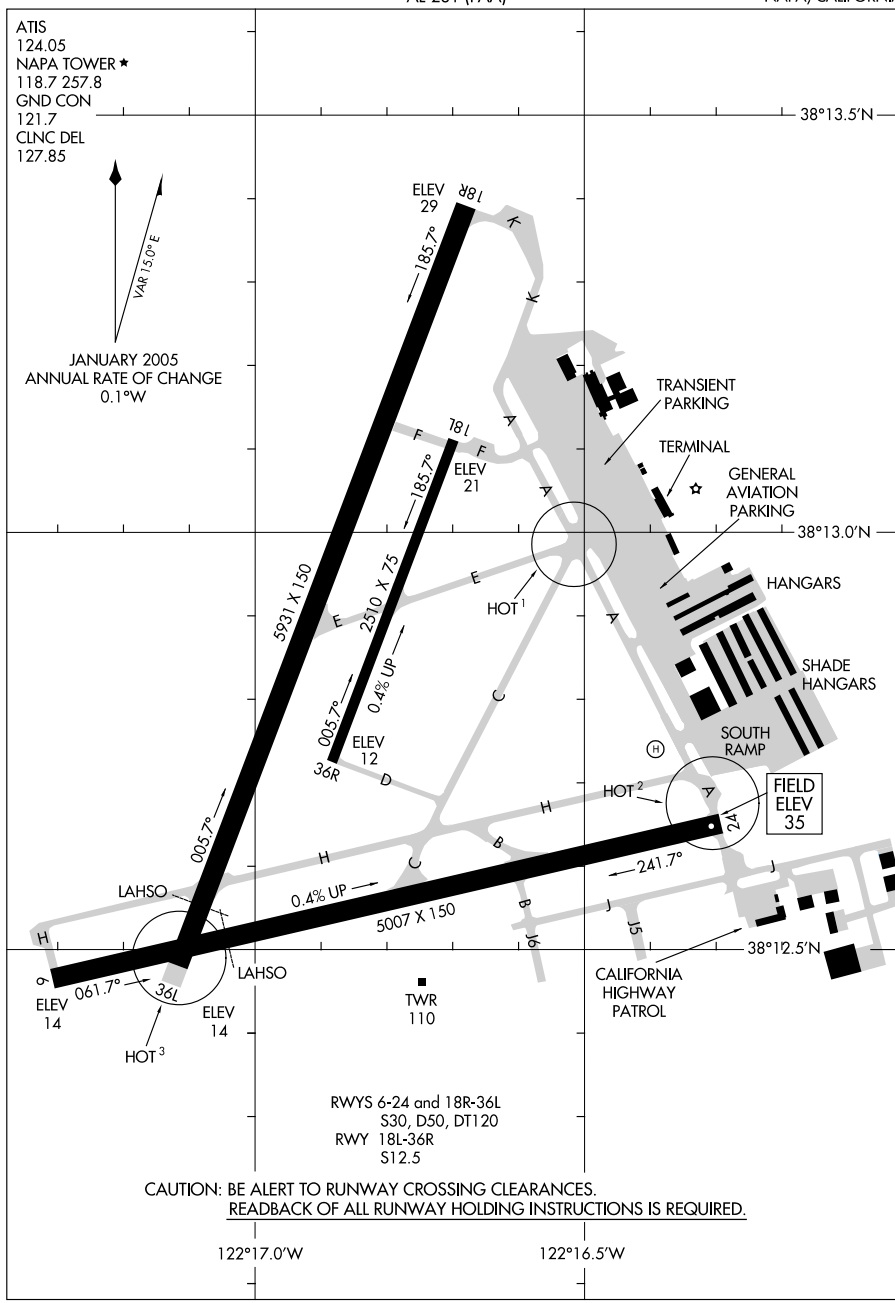
09071

10098

AIRPORT DIAGRAM

NAPA COUNTY (APC)
NAPA, CALIFORNIA

AL-281 (FAA)



AIRPORT DIAGRAM

NAPA, CALIFORNIA
NAPA COUNTY (APC)

10098

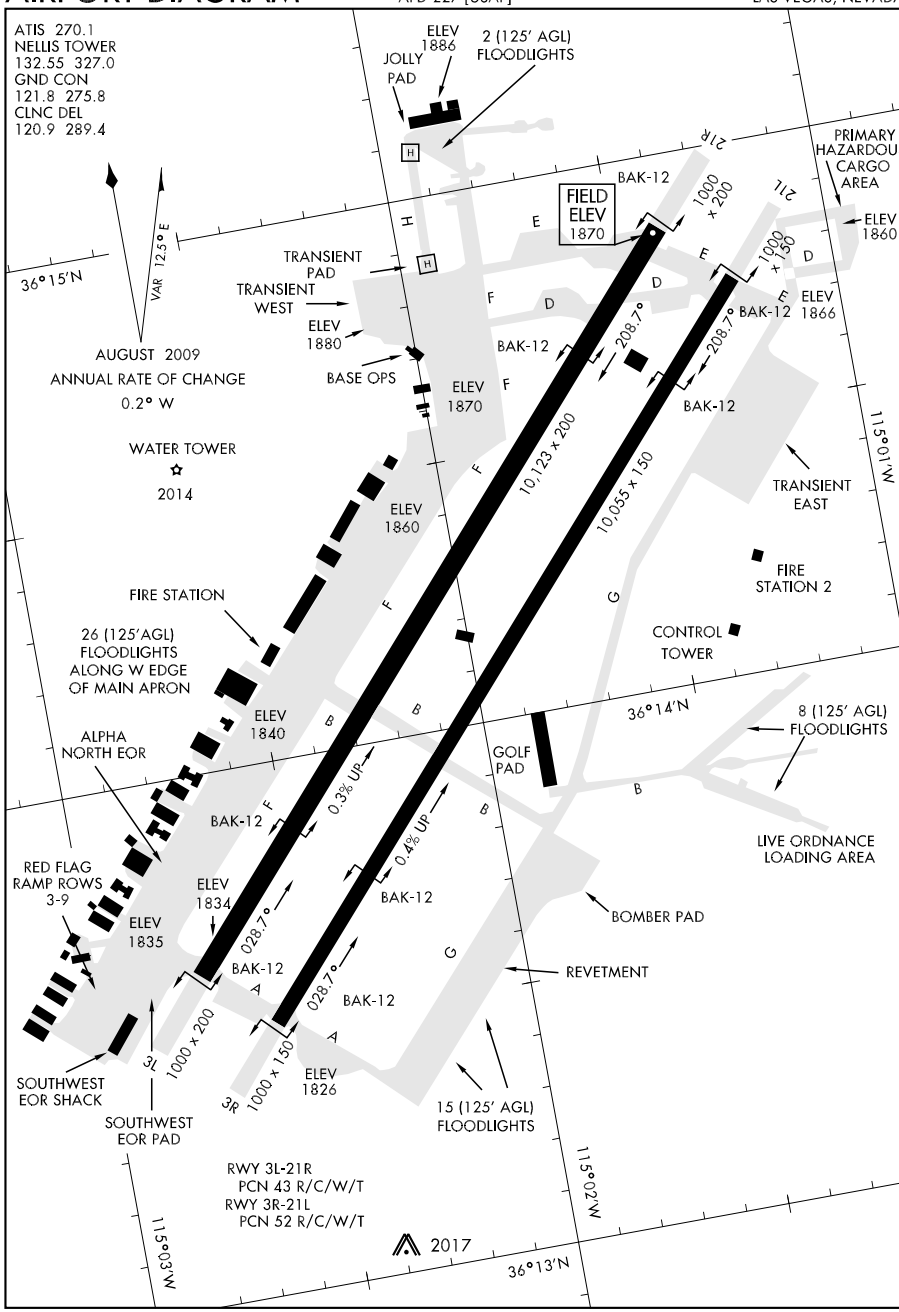
09239

AIRPORT DIAGRAM

NELLIS AFB (KLSV)

AFD-227 [USAF]

LAS VEGAS, NEVADA



AIRPORT DIAGRAM

LAS VEGAS, NEVADA
NELLIS AFB (KLSV)

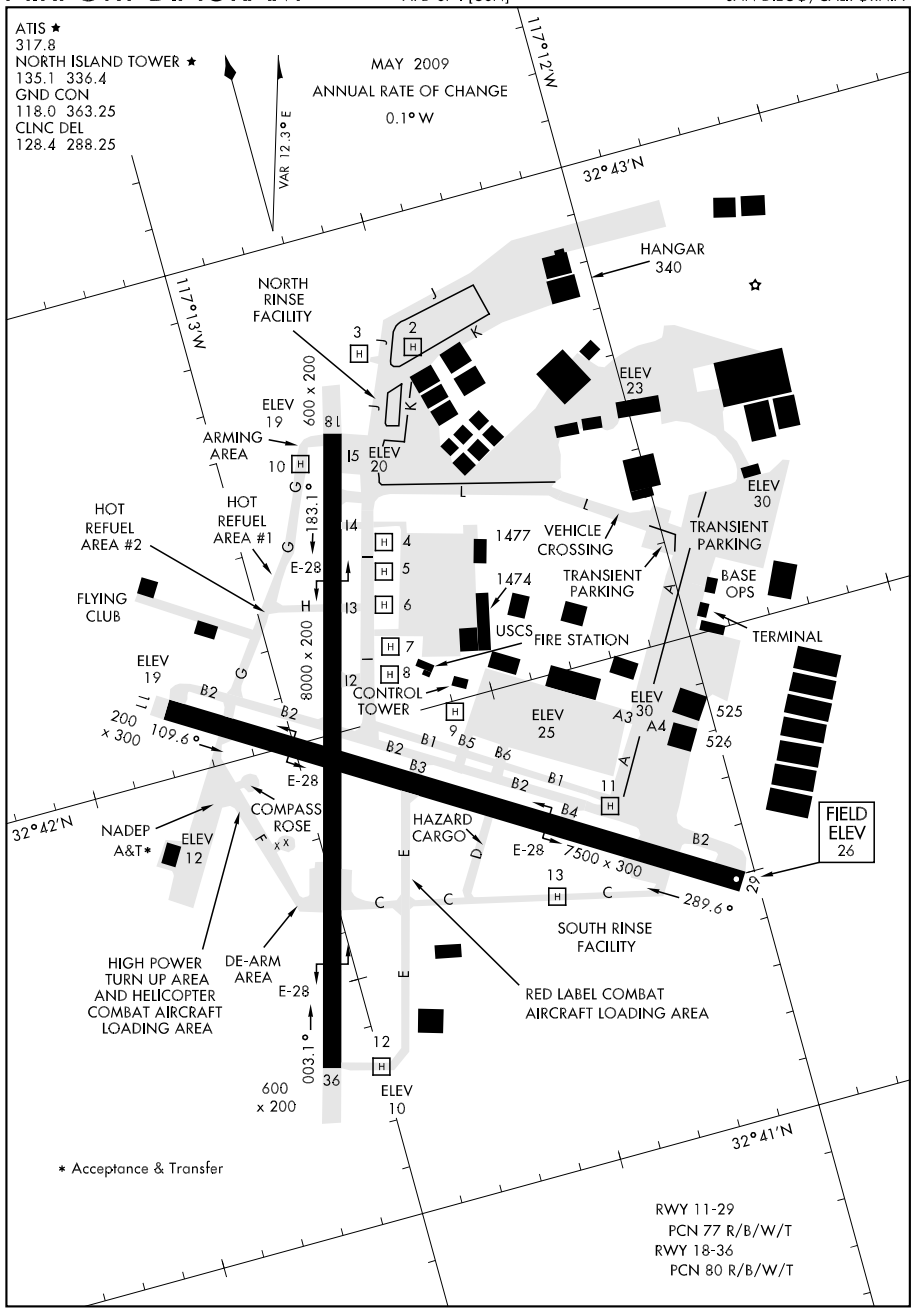
09127

AIRPORT DIAGRAM

NORTH ISLAND NAS (HALSEY FIELD) (KNZY)

AFD-374 [USN]

SAN DIEGO, CALIFORNIA



AIRPORT DIAGRAM

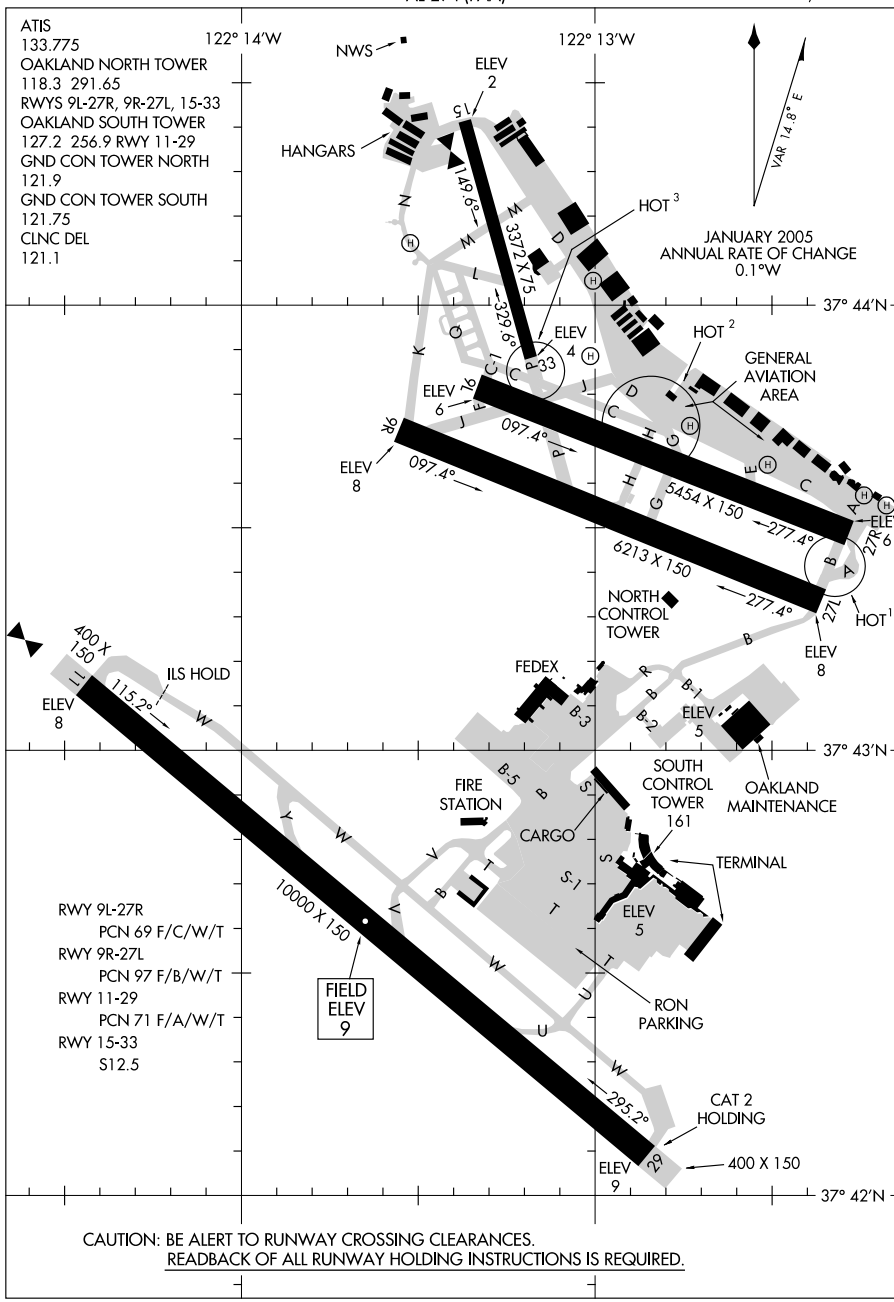
SAN DIEGO, CALIFORNIA

NORTH ISLAND NAS (HALSEY FIELD) (KNZY)

10042

AIRPORT DIAGRAM

OAKLAND/METROPOLITAN OAKLAND INTL (OAK)
AL-294 (FAA)
OAKLAND, CALIFORNIA



AIRPORT DIAGRAM

OAKLAND, CALIFORNIA
OAKLAND/METROPOLITAN OAKLAND INTL (OAK)

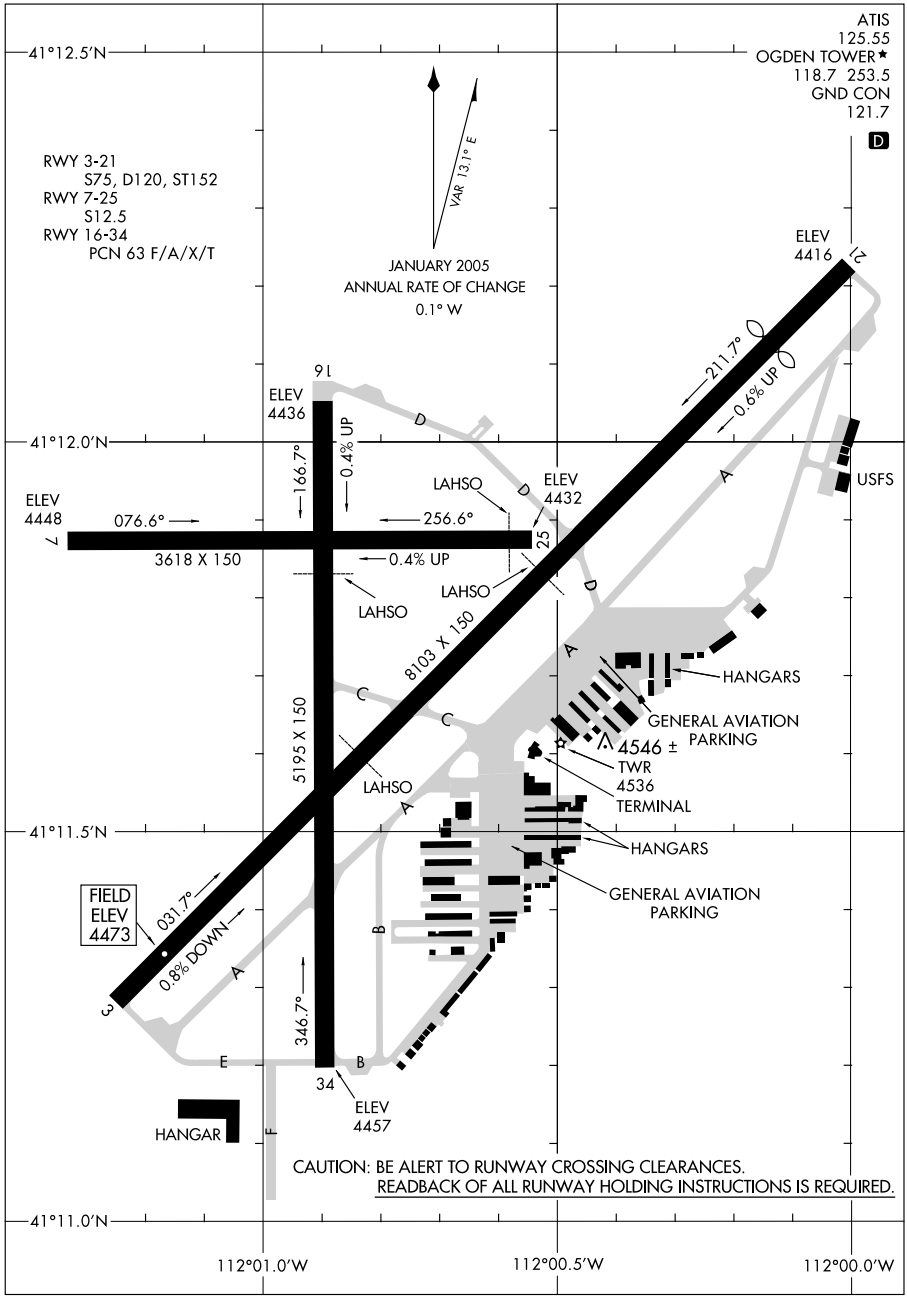
10042

09351

AIRPORT DIAGRAM

AL-297 (FAA)

OGDEN-HINCKLEY (OGD)
OGDEN, UTAH



AIRPORT DIAGRAM

09351

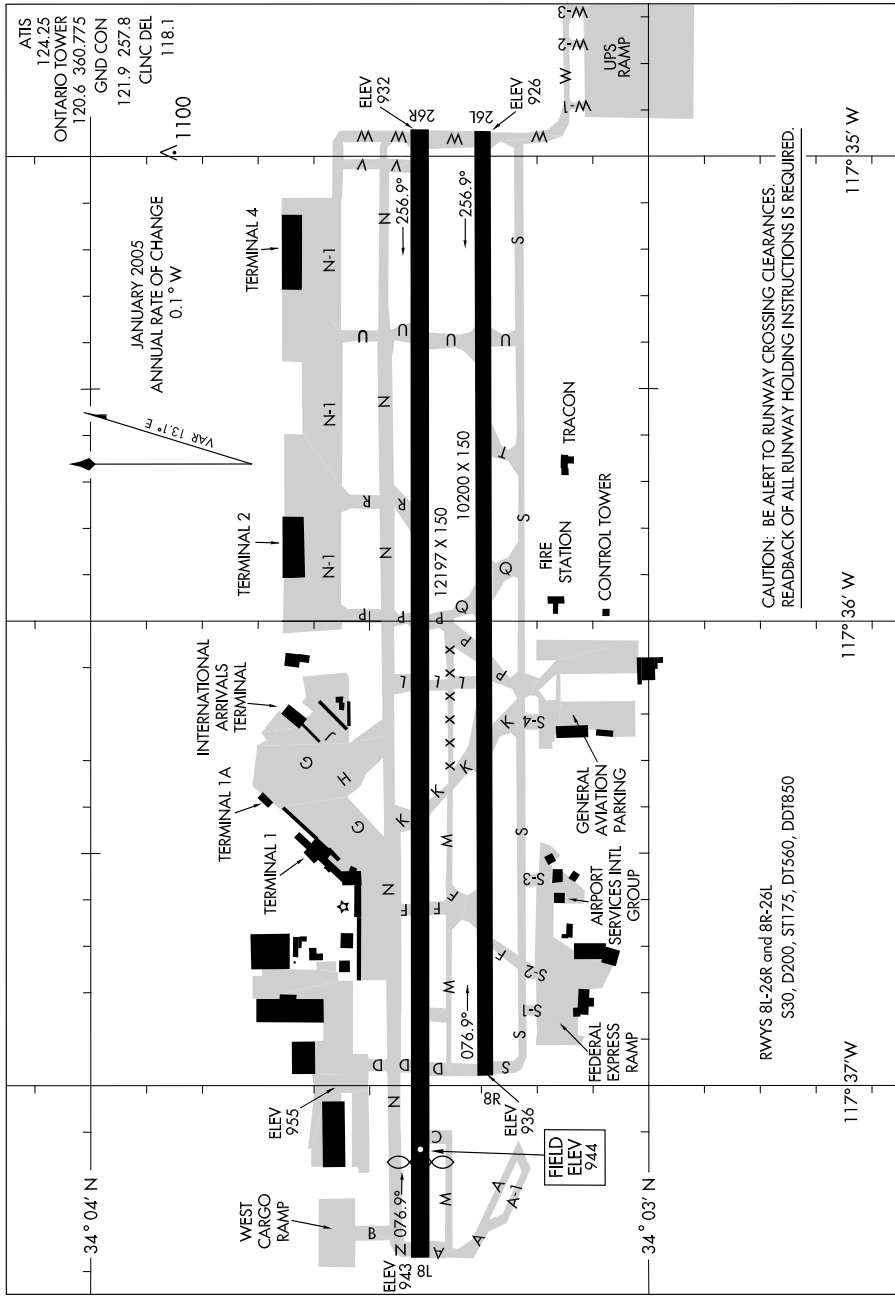
OGDEN, UTAH
OGDEN-HINCKLEY (OGD)

09239

AIRPORT DIAGRAM

AL-965 (FAA)

ONTARIO INTL (ONT)
ONTARIO, CALIFORNIA



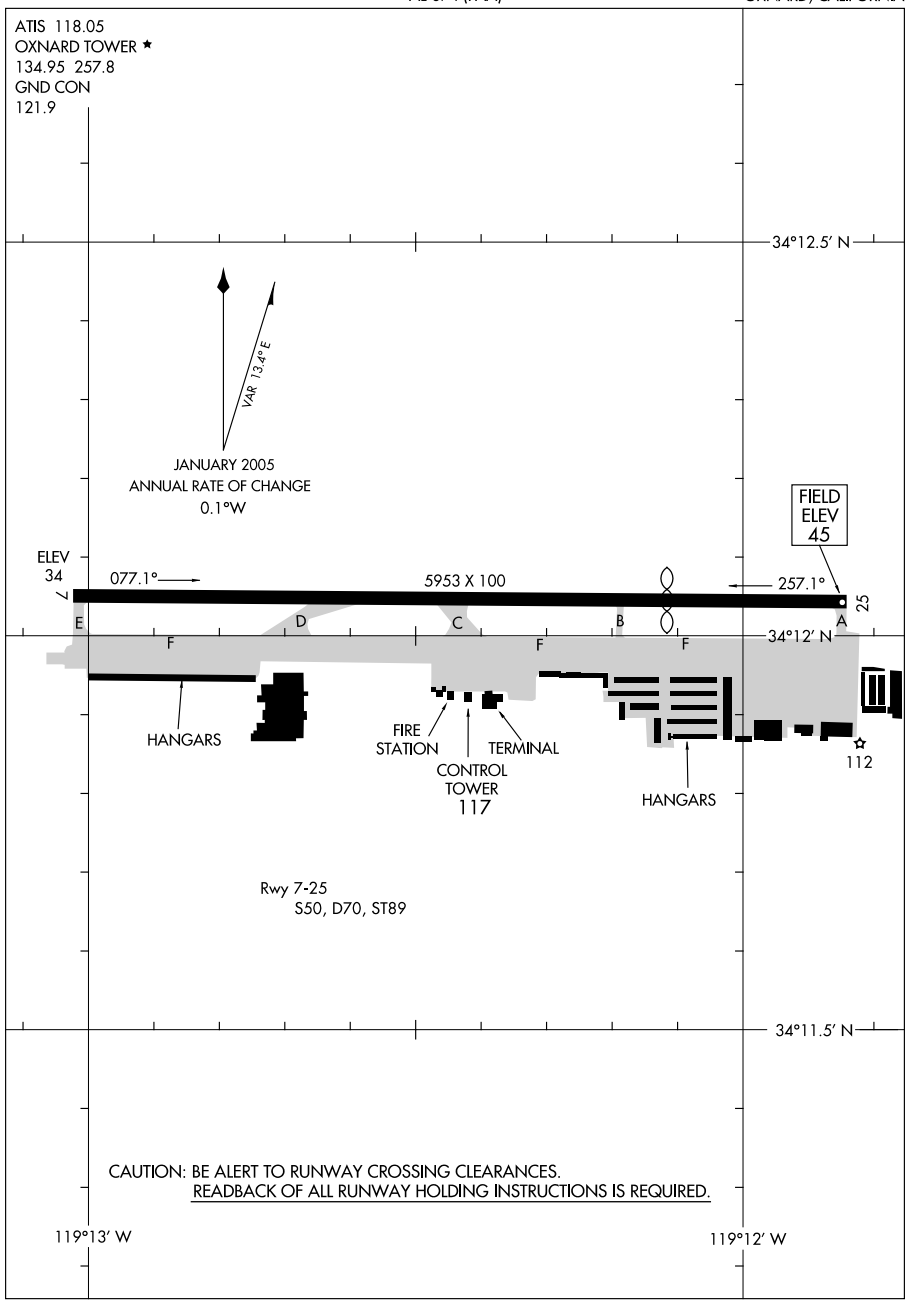
AIRPORT DIAGRAM
09239
ONTARIO, CALIFORNIA
ONTARIO INTL (ONT)

08325

AIRPORT DIAGRAM

AL-674 (FAA)

OXNARD (OXR)
OXNARD, CALIFORNIA



AIRPORT DIAGRAM

OXNARD, CALIFORNIA
OXNARD (OXR)

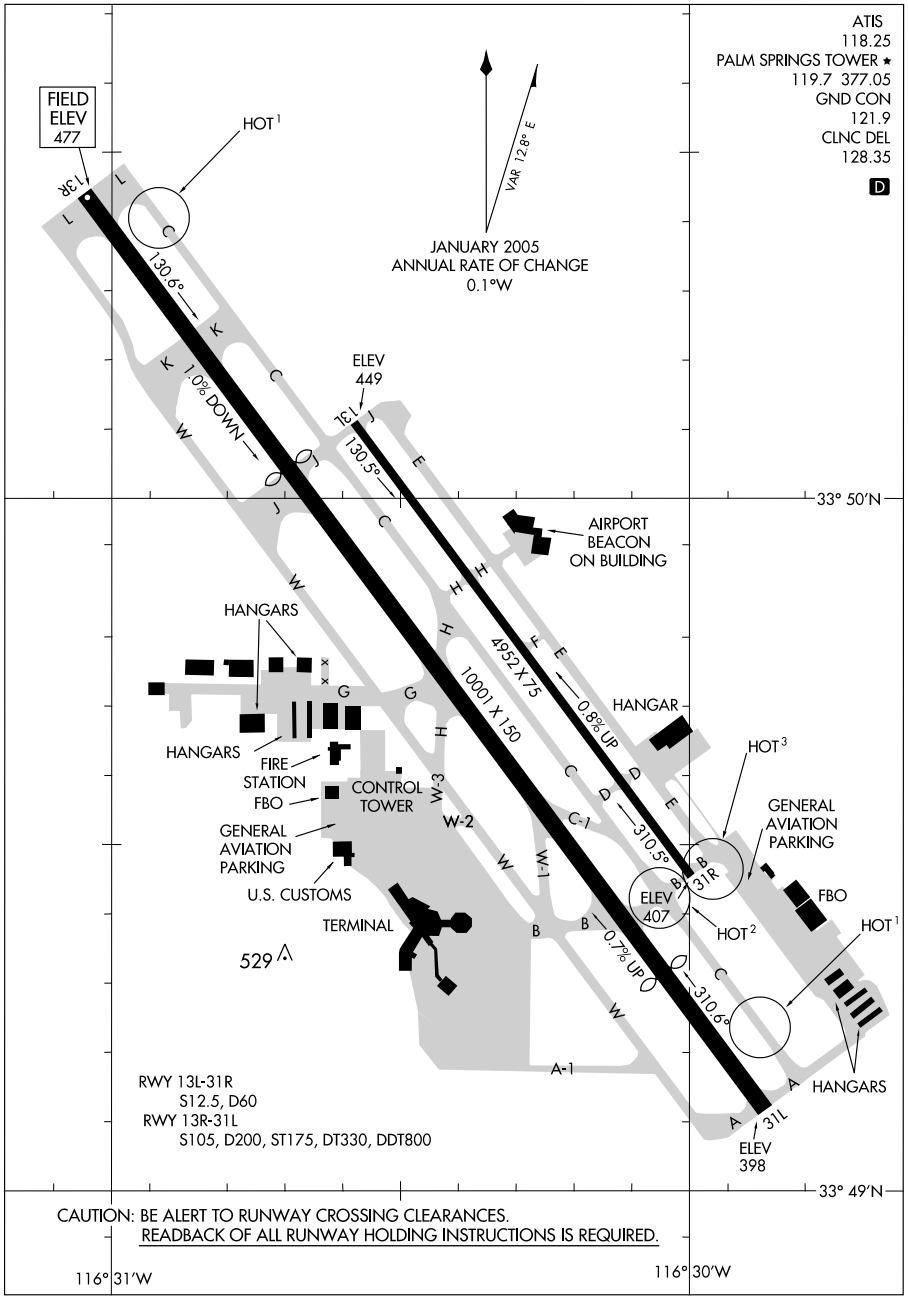
08325

09351

AIRPORT DIAGRAM

AL-545 (FAA)

PALM SPRINGS INTL (PSP)
PALM SPRINGS, CALIFORNIA



AIRPORT DIAGRAM

09351

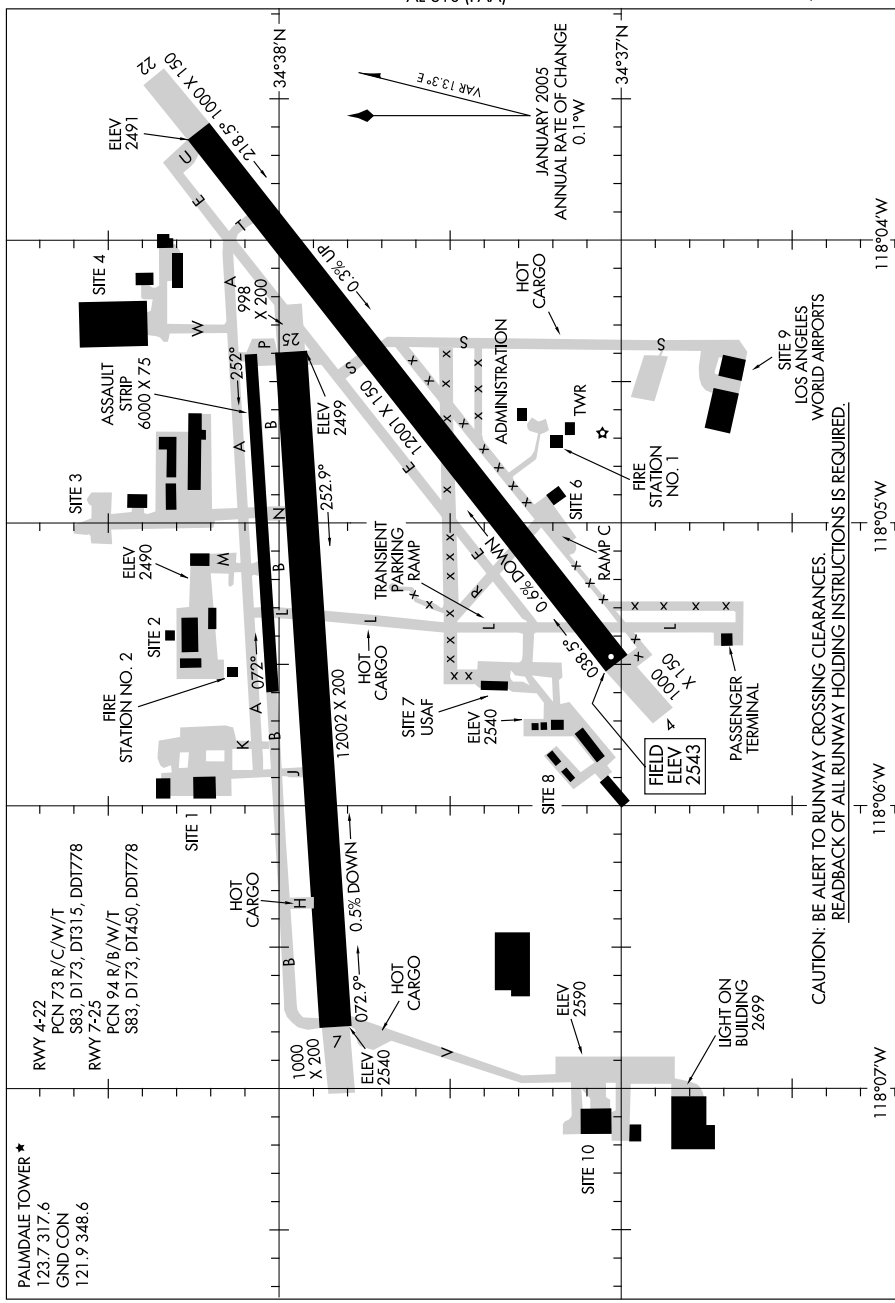
PALM SPRINGS, CALIFORNIA
PALM SPRINGS INTL (PSP)

10042

AIRPORT DIAGRAM

PALMDALE RGNL/USAF PLANT 42 (PMD)
PALMDALE, CALIFORNIA

AL-310 (FAA)



AIRPORT DIAGRAM

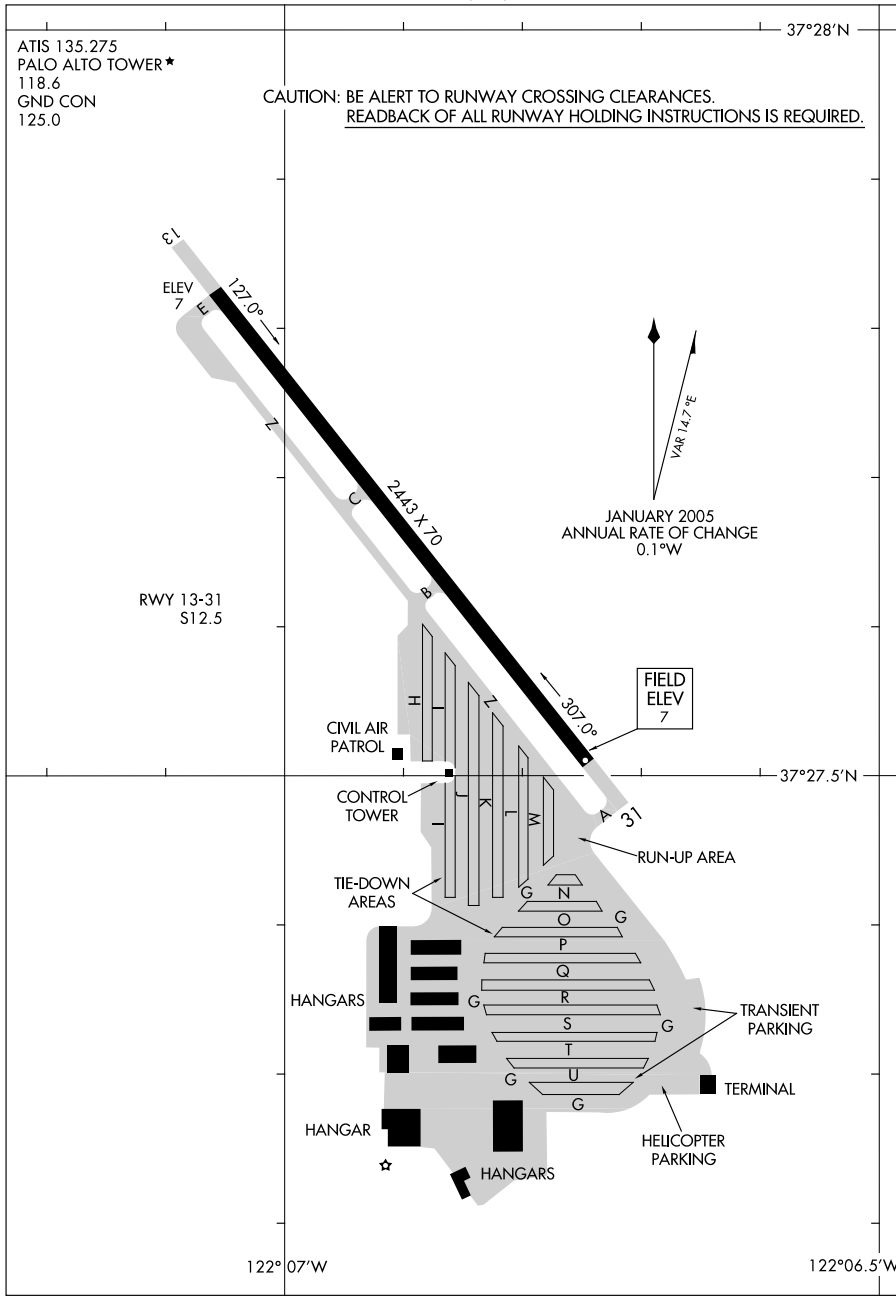
PALMDALE, CALIFORNIA
PALMDALE RGNL/USAF PLANT 42 (PMD)

10042

08213

AIRPORT DIAGRAM

PALO ALTO AIRPORT OF SANTA CLARA COUNTY (PAO)
AL-9216 (FAA)
PALO ALTO, CALIFORNIA



AIRPORT DIAGRAM

08213

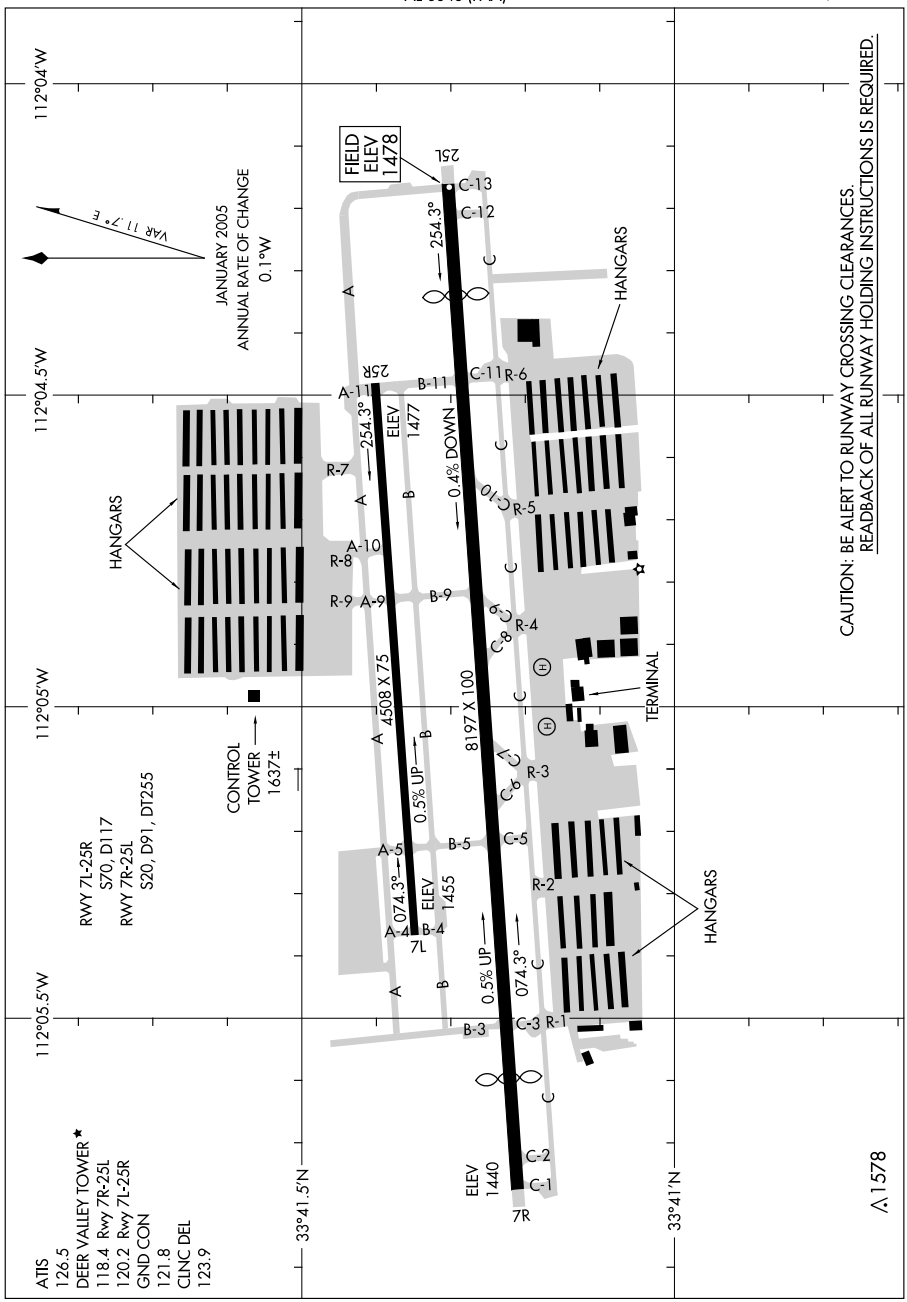
PALO ALTO, CALIFORNIA
PALO ALTO AIRPORT OF SANTA CLARA COUNTY (PAO)

09071

AIRPORT DIAGRAM

PHOENIX DEER VALLEY (DVT)
PHOENIX, ARIZONA

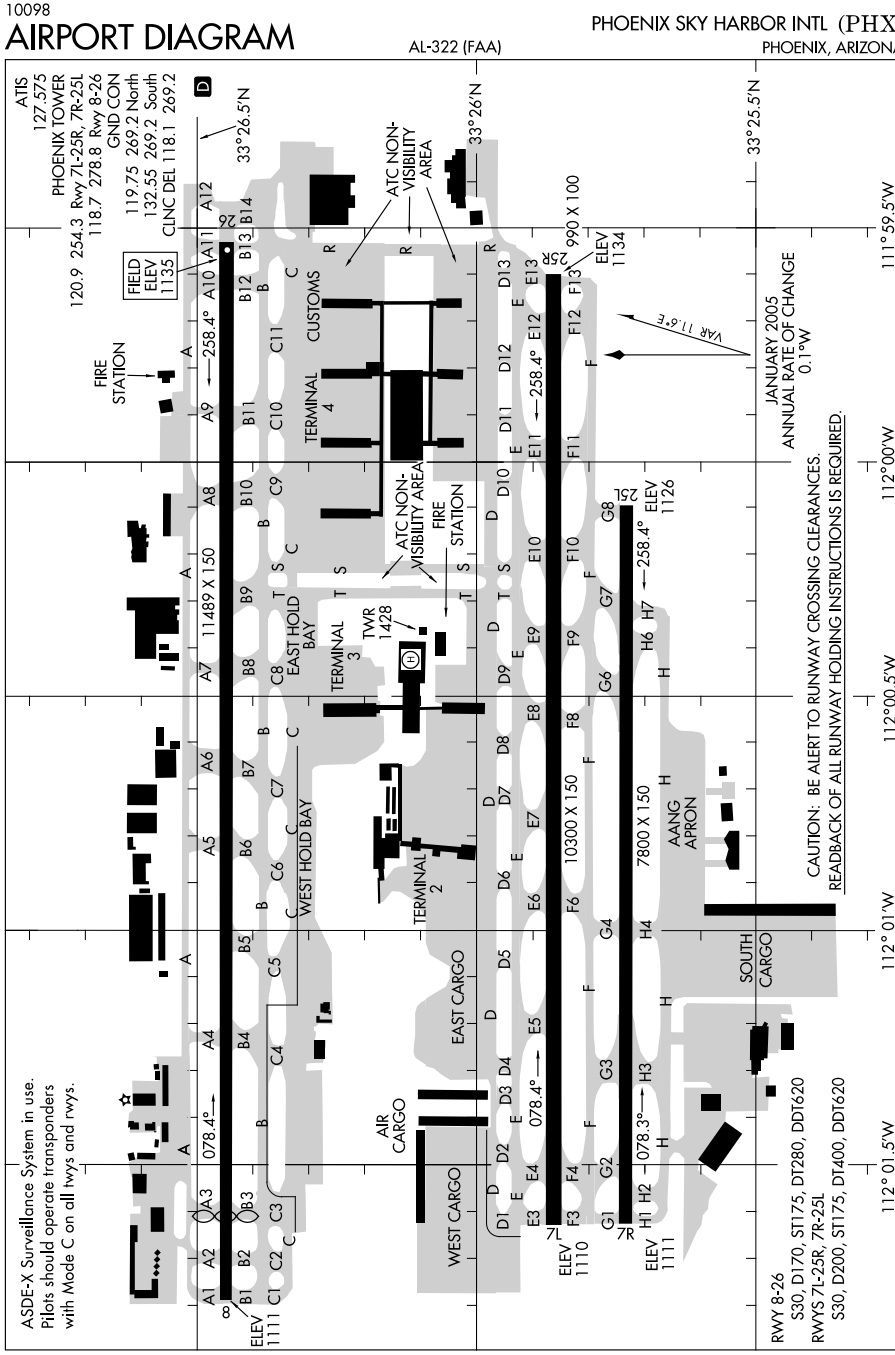
AL-6646 (FAA)



AIRPORT DIAGRAM

09071

PHOENIX, ARIZONA
PHOENIX DEER VALLEY (DVT)

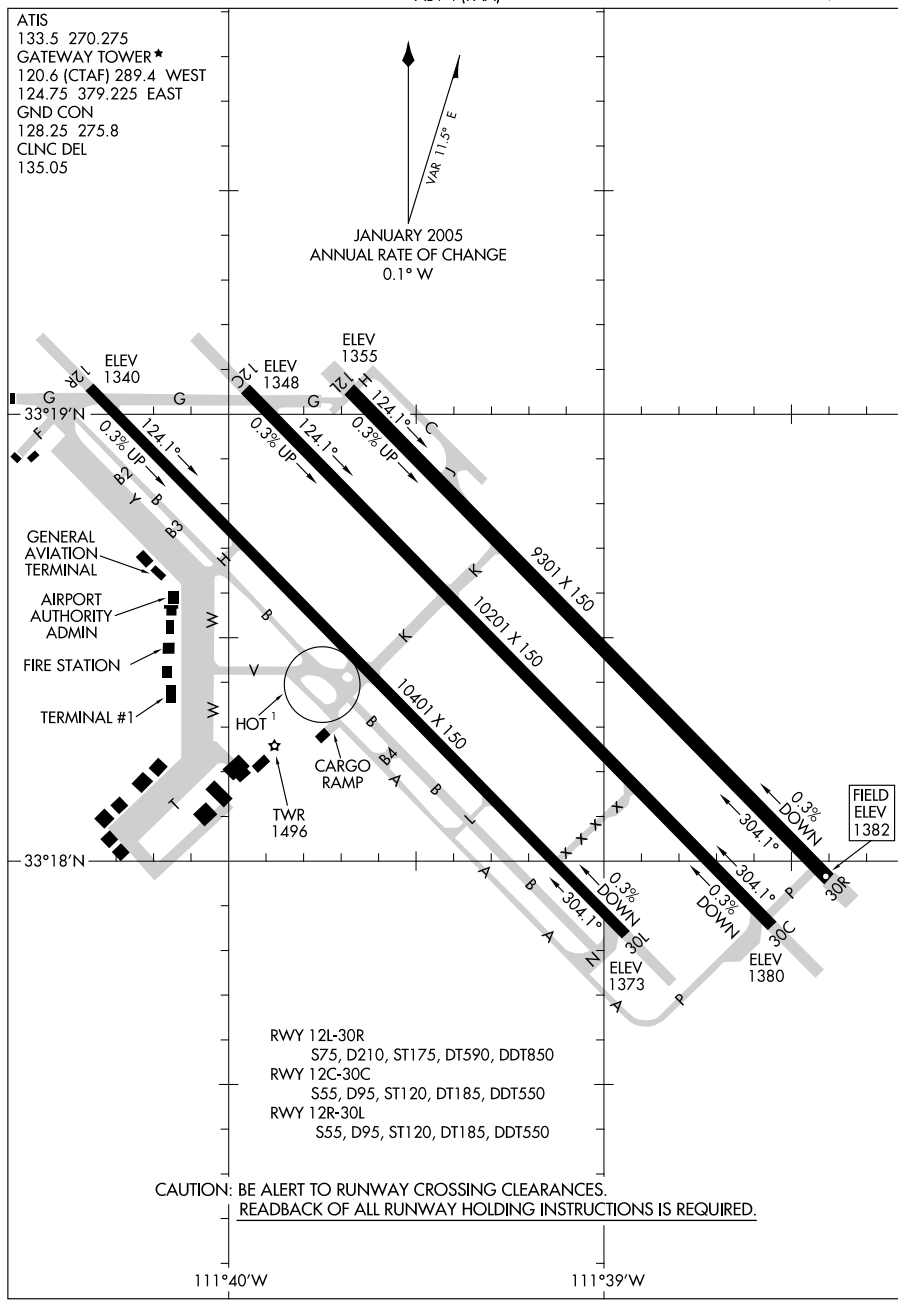

10098
AIRPORT DIAGRAM
PHOENIX SKY HARBOR INTL (PHX)
AL-322 (FAA)
PHOENIX, ARIZONA
ATIS 127.575
PHOENIX TOWER 120.9 254.3 Rwy 7L-25R, 7R-25L 118.7 278.8 Rwy 8-26
GND CON 119.75 269.2 North 132.55 269.2 South
CLNC DEL 118.1 269.2
FIELD ELEV 1135
FIRE STATION
TERMINAL 4
CUSTOMS
ATC NON-VISIBILITY AREA
TERMINAL 3
EAST HOLD BAY
TWR 1428
TERMINAL 2
WEST HOLD BAY
AIR CARGO
EAST CARGO
WEST CARGO
SOUTH CARGO
AANG APRON
11489 X 150
10300 X 150
7800 X 150
990 X 100
ELEV 1134
ELEV 1126
ELEV 1111
ELEV 1110
ELEV 1111
VAR 11.6°E
JANUARY 2005 ANNUAL RATE OF CHANGE 0.1°W
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES. READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
ASDE-X Surveillance System in use.
Pilots should operate transponders with Mode C on all twys and rwys.
RWY 8-26 S30, D170, ST175, DT280, DDT620
RWYS 7L-25R, 7R-25L S30, D200, ST175, DT400, DDT620
33°26.5'N
33°25.5'N
112° 01.5'W
112° 01'W
112°00.5'W
112°00'W
111°59.5'W
AIRPORT DIAGRAM
10098
PHOENIX, ARIZONA
PHOENIX SKY HARBOR INTL (PHX)

10098

AIRPORT DIAGRAM

PHOENIX-MESA GATEWAY (IWA)
PHOENIX, ARIZONA

AL-74 (FAA)



AIRPORT DIAGRAM
10098

PHOENIX, ARIZONA
PHOENIX-MESA GATEWAY (IWA)

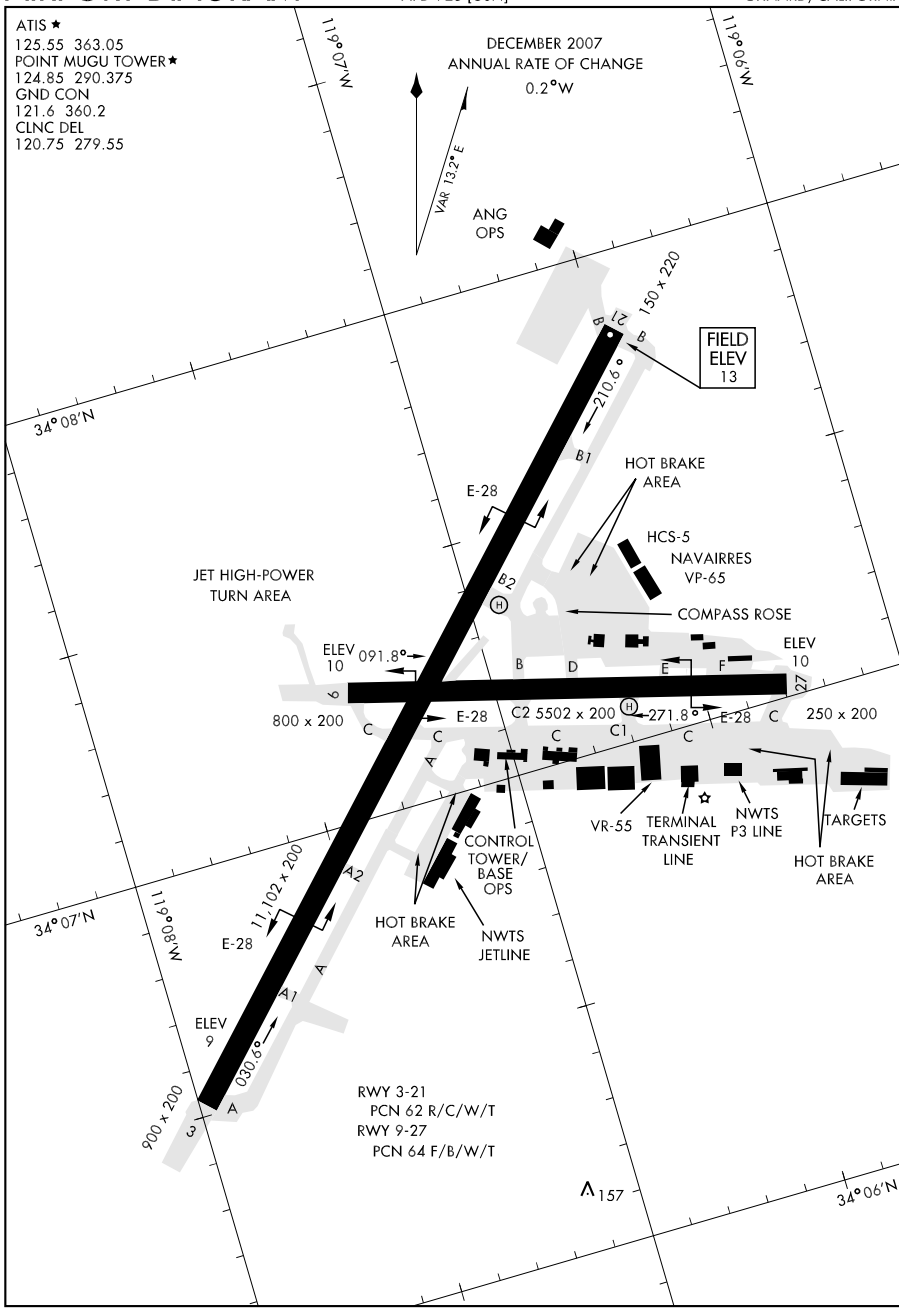
07354

AIRPORT DIAGRAM

POINT MUGU NAS (NAVAL BASE VENTURA CO) (KNTD)

AFD-925 [USN]

OXNARD, CALIFORNIA



AIRPORT DIAGRAM

OXNARD, CALIFORNIA

POINT MUGU NAS (NAVAL BASE VENTURA CO) (KNTD)

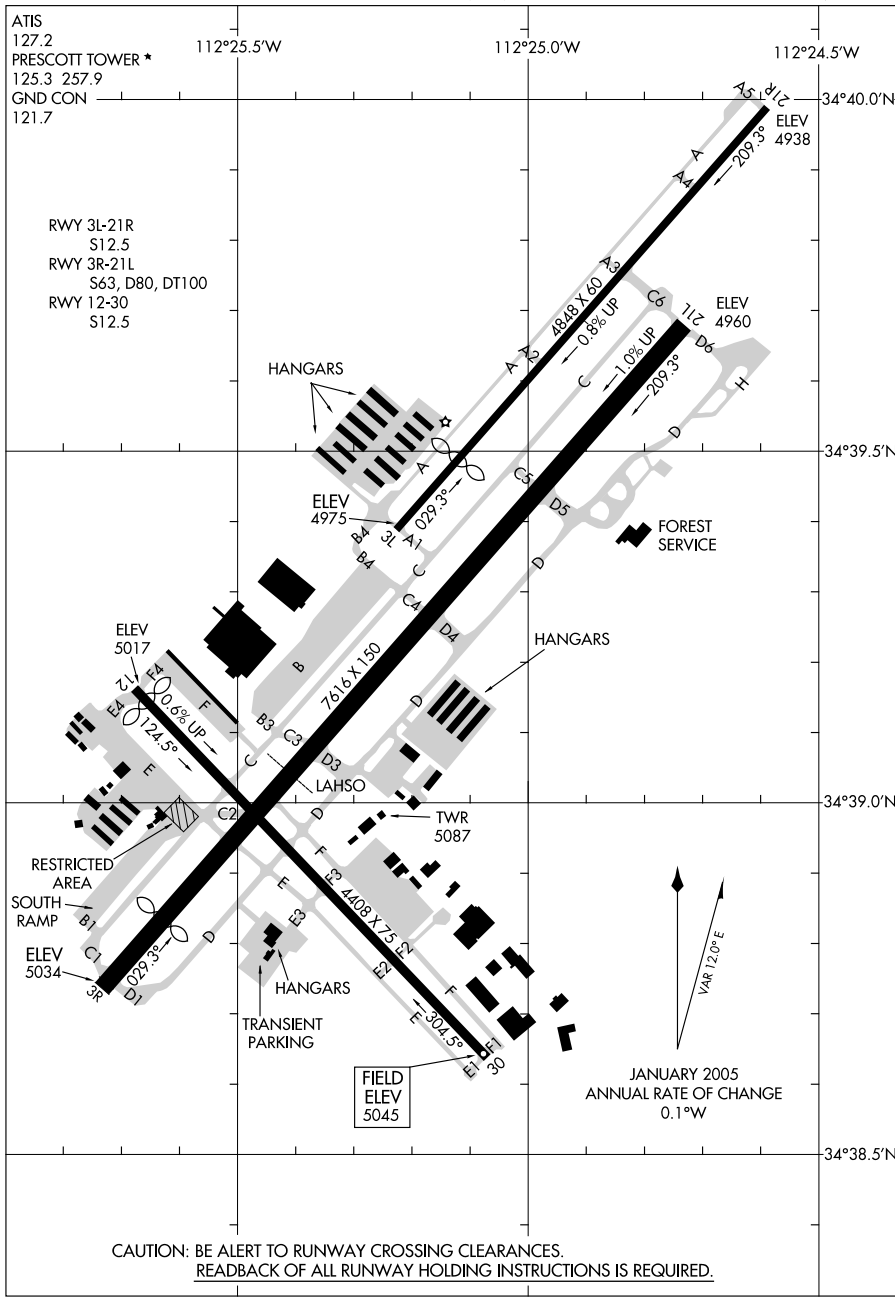
10098

AIRPORT DIAGRAM

PRESCOTT/ ERNEST A. LOVE FIELD (PRC)

AL-546 (FAA)

PRESCOTT, ARIZONA

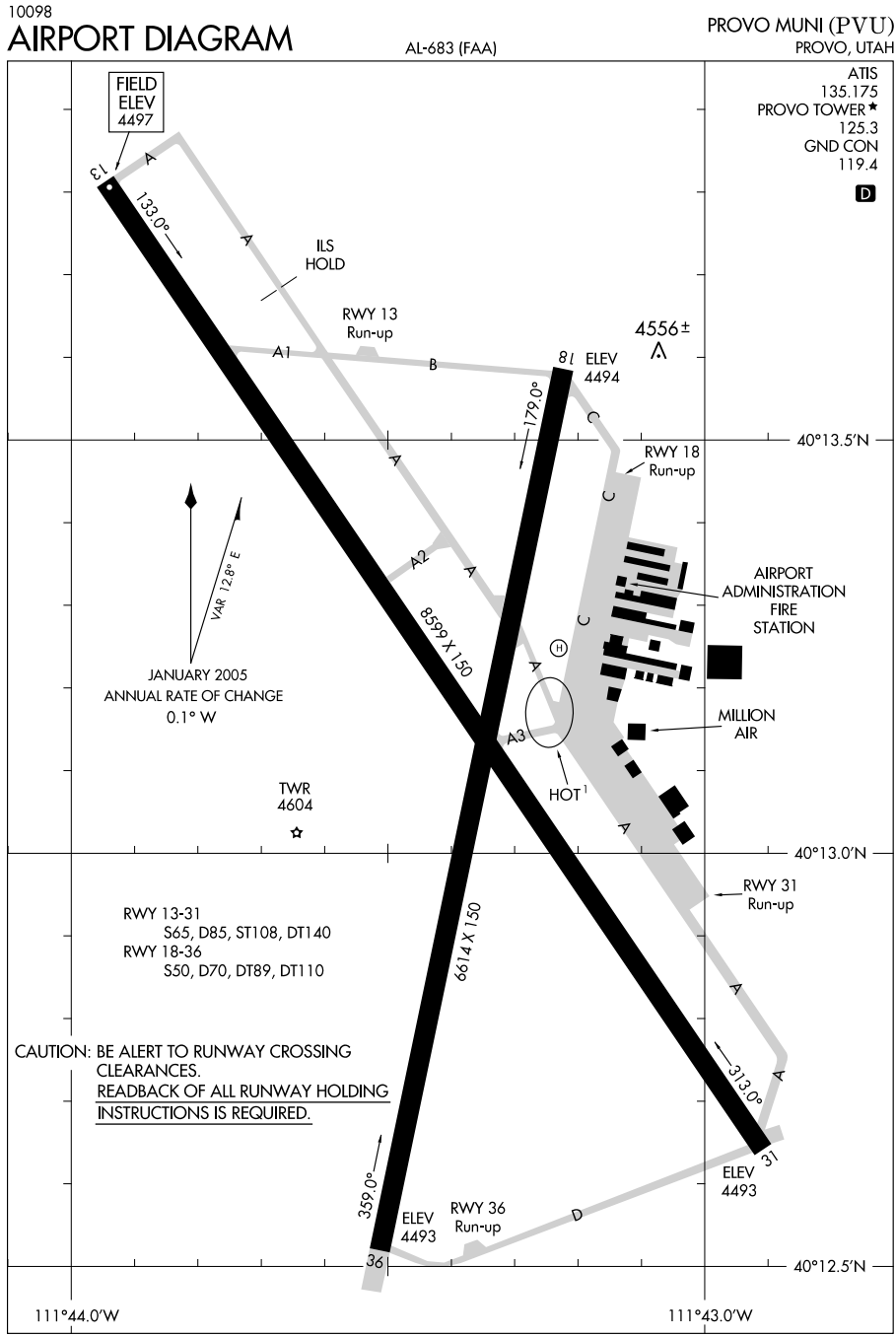


AIRPORT DIAGRAM

PRESCOTT, ARIZONA

PRESCOTT/ ERNEST A. LOVE FIELD (PRC)

10098

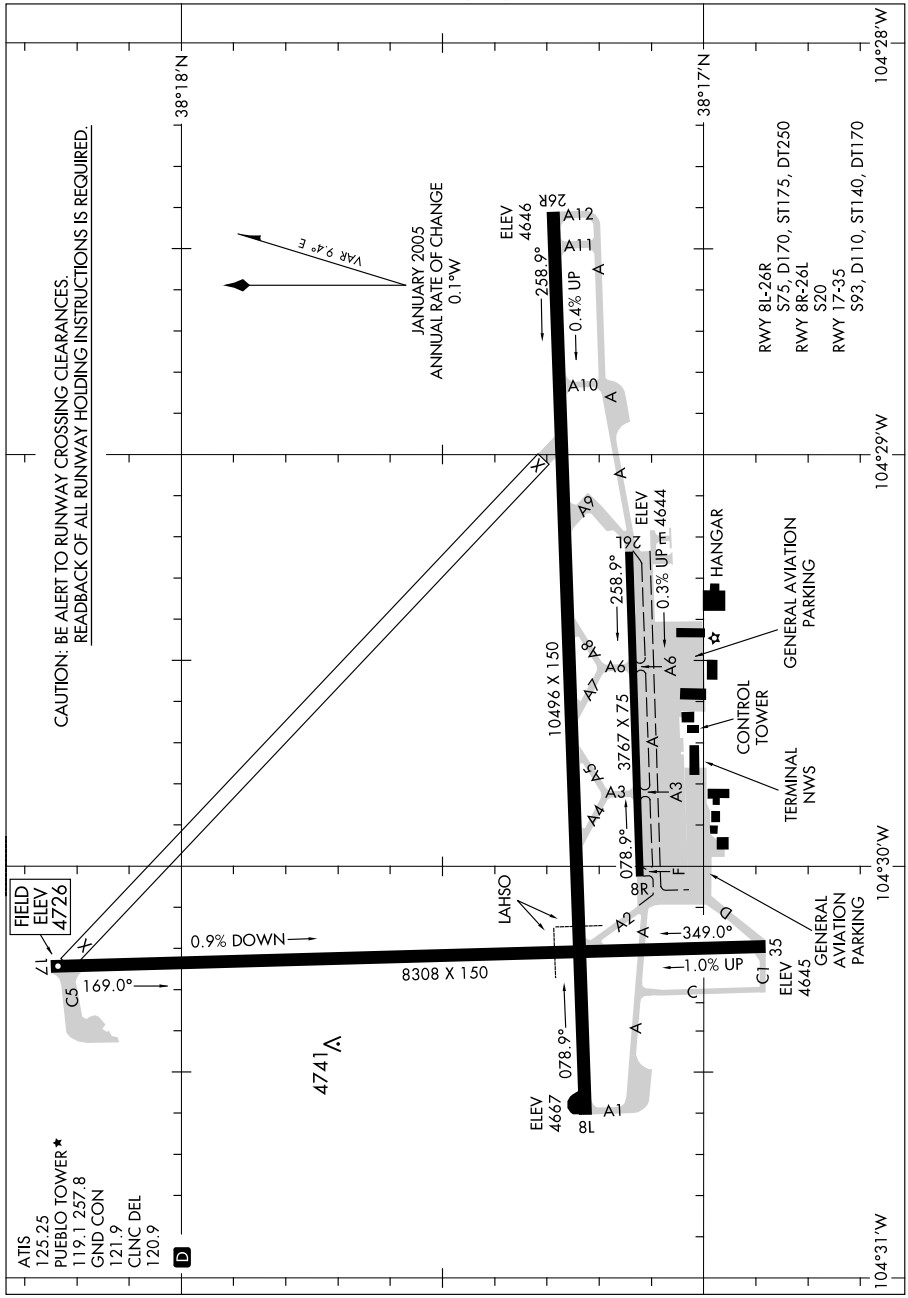

10098
AIRPORT DIAGRAM
AL-683 (FAA)
PROVO MUNI (PVU)
PROVO, UTAH
ATIS
135.175
PROVO TOWER
125.3
GND CON
119.4
FIELD ELEV 4497
13
133.0°
ILS HOLD
RWY 13 Run-up
4556±
A1
B
31 ELEV 4494
179.0°
C
40°13.5'N
RWY 18 Run-up
A2
8599 X 150
AIRPORT ADMINISTRATION FIRE STATION
VAR 12.8° E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1° W
A3
MILLION AIR
HOT
TWR 4604
40°13.0'N
RWY 31 Run-up
RWY 13-31
S65, D85, ST108, DT140
RWY 18-36
S50, D70, DT89, DT110
6614 X 150
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
313.0°
31
ELEV 4493
359.0°
ELEV 4493
RWY 36 Run-up
D
36
40°12.5'N
111°44.0'W
111°43.0'W
AIRPORT DIAGRAM
10098
PROVO, UTAH
PROVO MUNI (PVU)

09351

AIRPORT DIAGRAM

AL-334 (FAA)

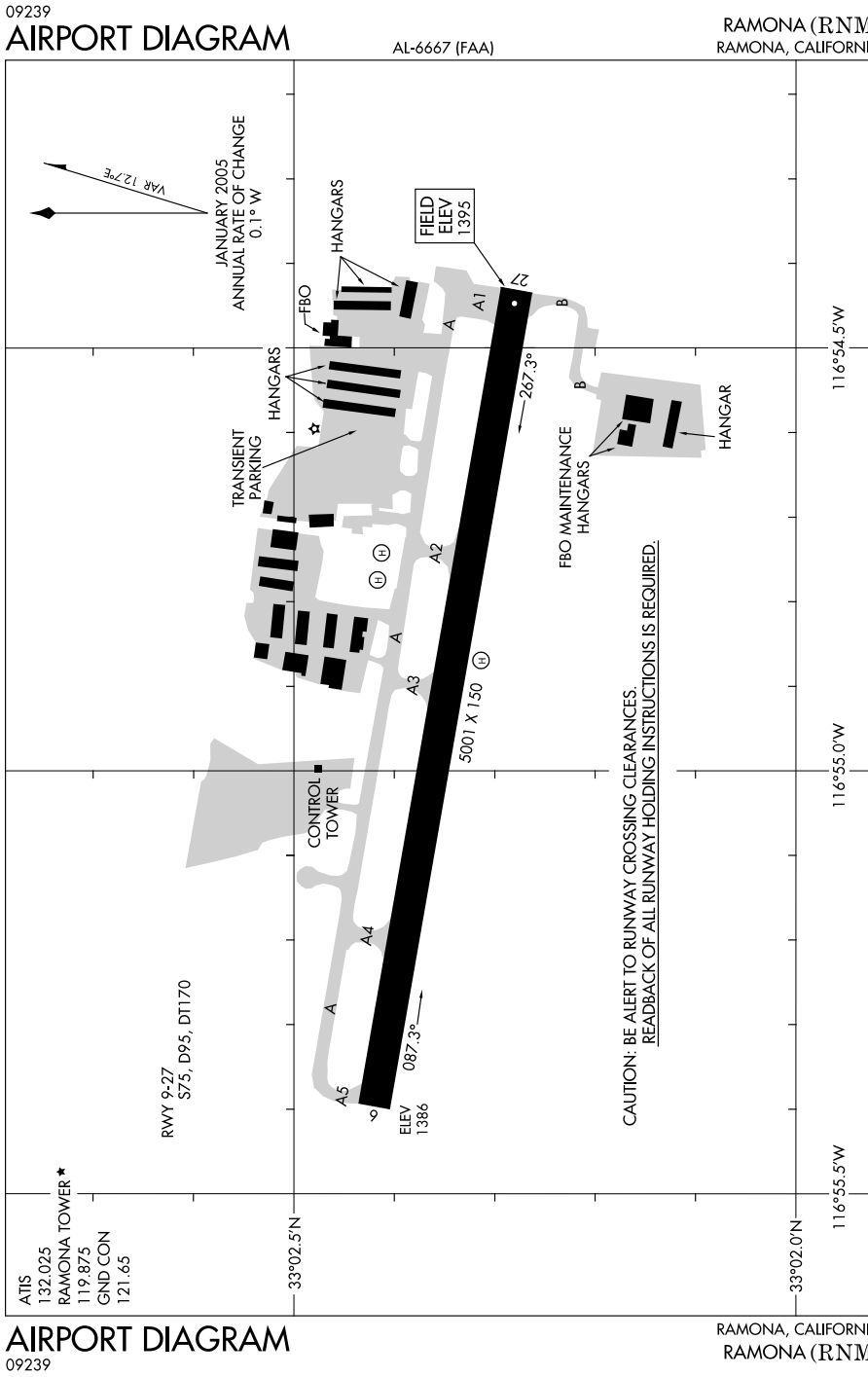
PUEBLO MEMORIAL (PUB)
PUEBLO, COLORADO



AIRPORT DIAGRAM

09351

PUEBLO, COLORADO
PUEBLO MEMORIAL (PUB)

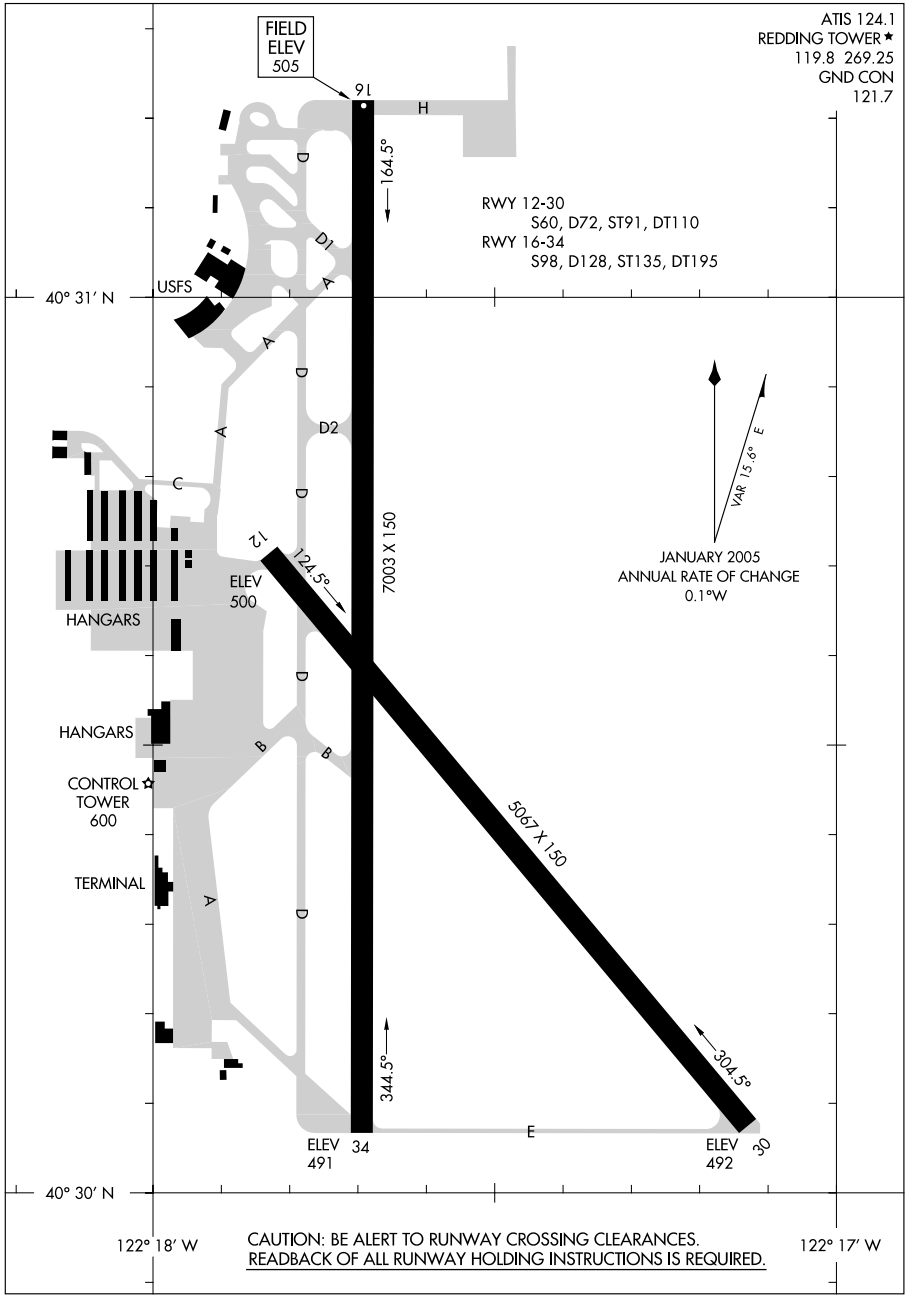

09239
AIRPORT DIAGRAM
AL-6667 (FAA)
RAMONA (RNM)
RAMONA, CALIFORNIA
VAR 12.7°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1° W
HANGARS
FBO
FIELD
ELEV
1395
27
A1
A
B
267.3°
HANGARS
TRANSIENT
PARKING
A2
A
A3
5001 X 150
FBO MAINTENANCE
HANGARS
HANGAR
CONTROL
TOWER
A4
A
A5
9
087.3°
ELEV
1386
RWY 9-27
S75, D95, DT170
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
ATIS
132.025
RAMONA TOWER
119.875
GND CON
121.65
33°02.5'N
33°02.0'N
116°55.5'W
116°55.0'W
116°54.5'W
AIRPORT DIAGRAM
09239
RAMONA, CALIFORNIA
RAMONA (RNM)

08325

AIRPORT DIAGRAM

AL-688 (FAA)

REDDING MUNI (RDD)
REDDING, CALIFORNIA



AIRPORT DIAGRAM

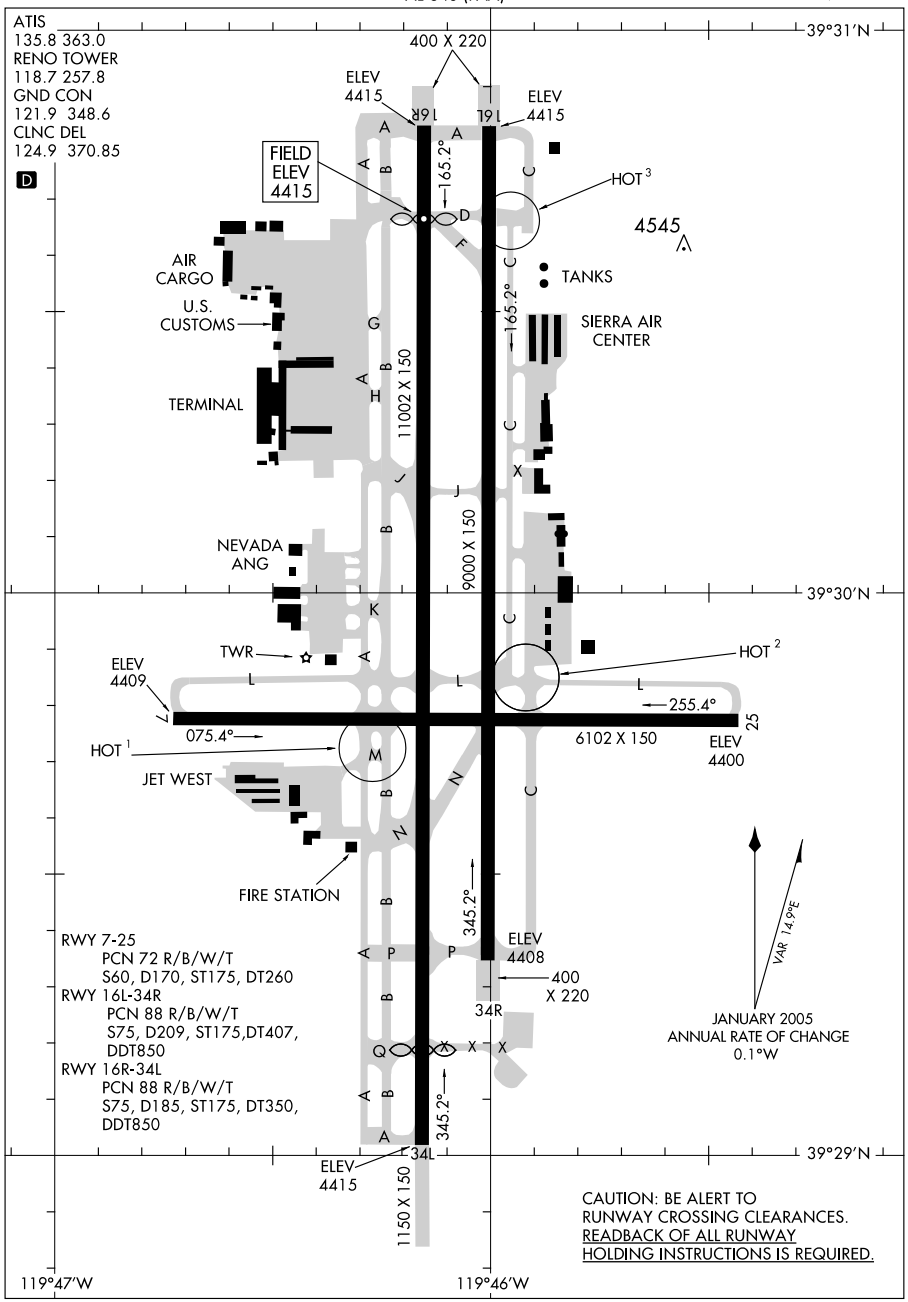
REDDING, CALIFORNIA
REDDING MUNI (RDD)

08325

09295

AIRPORT DIAGRAM

RENO/TAHOE INTL (RNO)
RENO, NEVADA



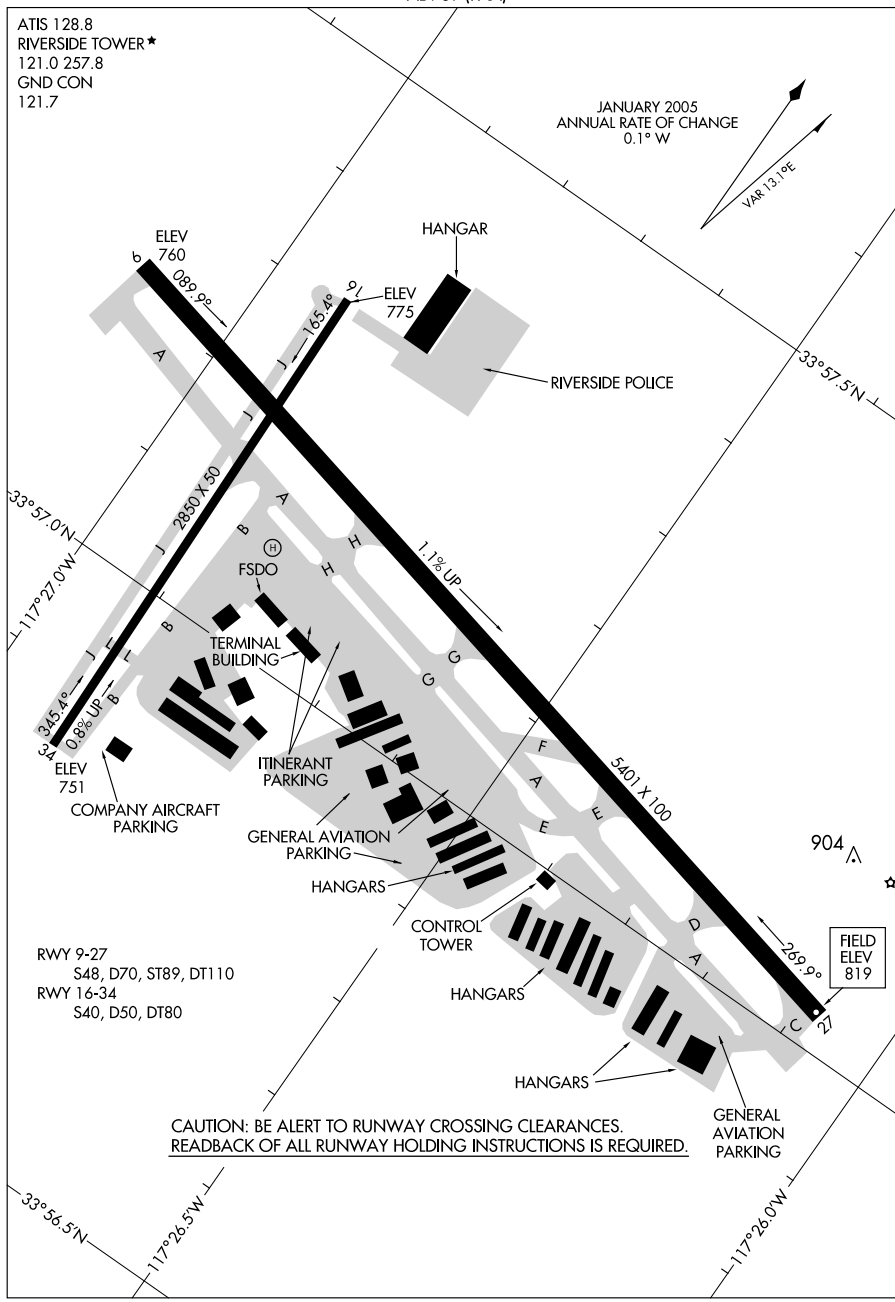
AIRPORT DIAGRAM
09295
RENO, NEVADA
RENO/TAHOE INTL (RNO)

07354

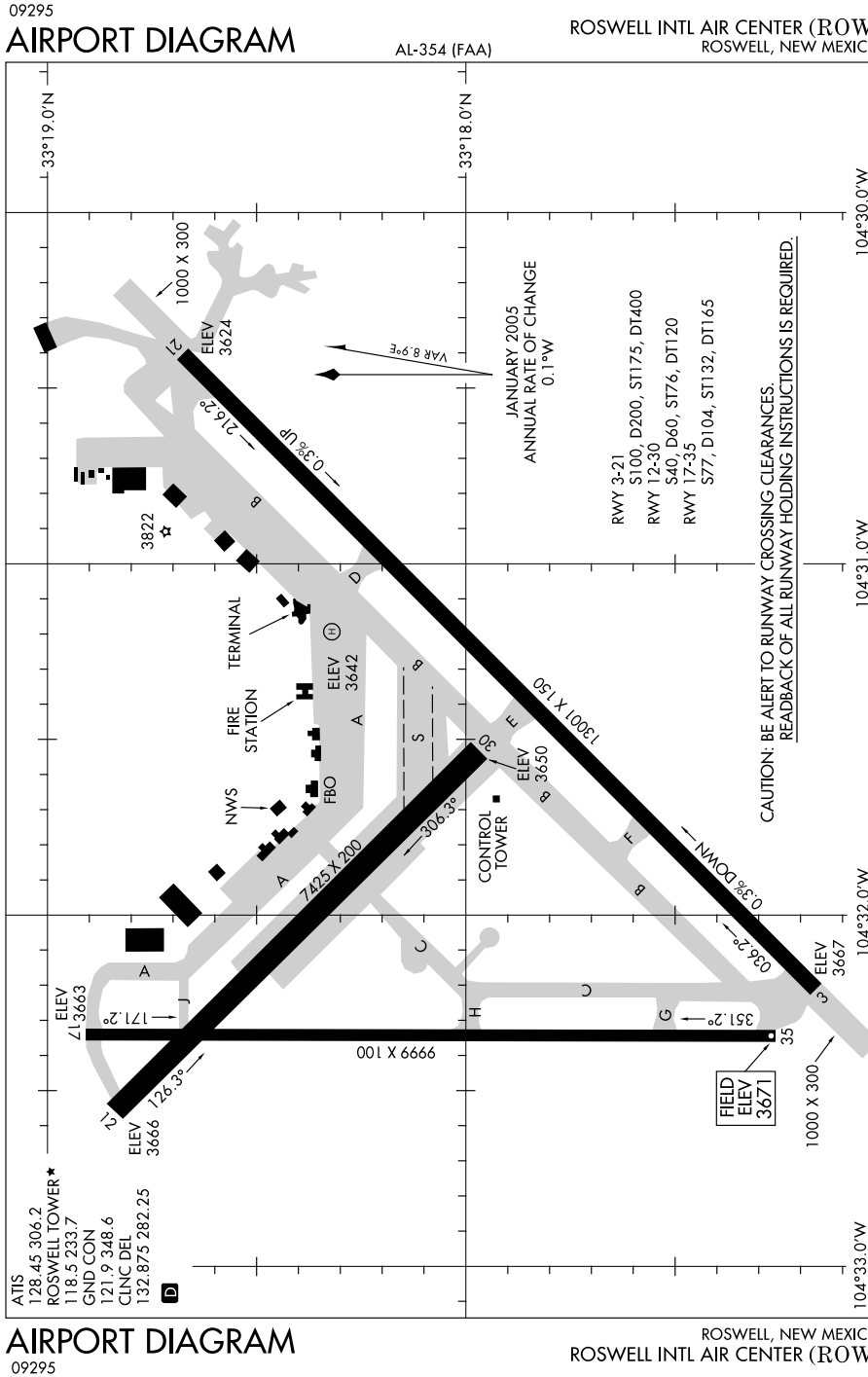
AIRPORT DIAGRAM

RIVERSIDE MUNI (RAL)
RIVERSIDE, CALIFORNIA

AL-769 (FAA)



AIRPORT DIAGRAM
07354
RIVERSIDE, CALIFORNIA
RIVERSIDE MUNI (RAL)

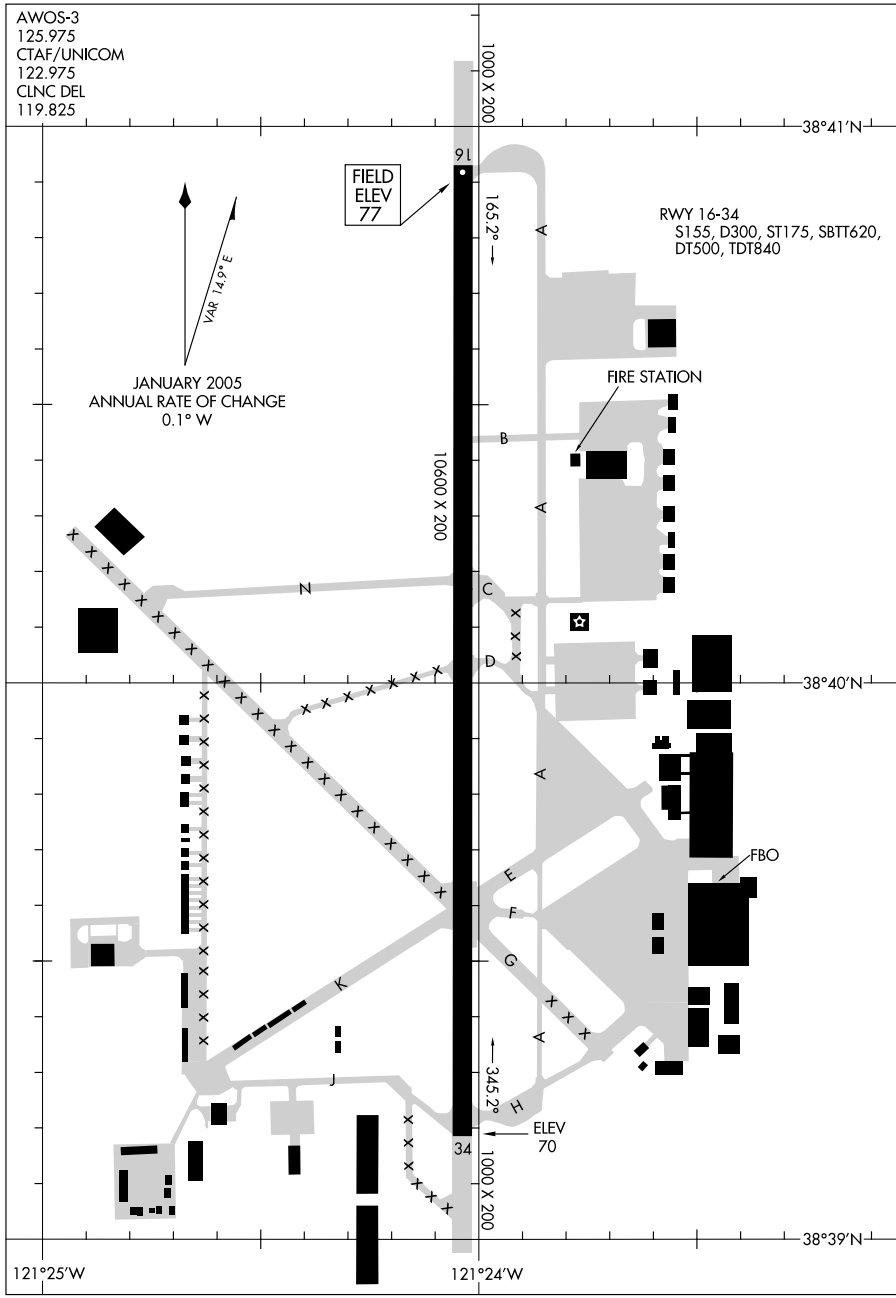

09295
AIRPORT DIAGRAM
AL-354 (FAA)
ROSWELL INTL AIR CENTER (ROW)
ROSWELL, NEW MEXICO
33°19.0'N
33°18.0'N
104°30.0'W
104°31.0'W
104°32.0'W
104°33.0'W
1000 X 300
ELEV 3624
21
216.2°
0.3% UP
VAR 8.9°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
RWY 3-21
S100, D200, ST175, DT400
RWY 12-30
S40, D60, ST76, DT120
RWY 17-35
S77, D104, ST132, DT165
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
3822
TERMINAL
FIRE STATION
NWS
FBO
ELEV 3642
7425 X 200
306.3°
CONTROL TOWER
ELEV 3650
13001 X 150
0.3% DOWN
036.2°
ELEV 3667
351.2°
35
9999 X 100
171.2°
ELEV 3663
ELEV 3666
126.3°
FIELD ELEV 3671
1000 X 300
ATIS
128.45 306.2
ROSWELL TOWER*
118.5 233.7
GND CON
121.9 348.6
CLNC DEL
132.875 282.25
AIRPORT DIAGRAM
09295
ROSWELL, NEW MEXICO
ROSWELL INTL AIR CENTER (ROW)

09239

AIRPORT DIAGRAM

SACRAMENTO/ MC CLELLAN AIRFIELD (MCC)
SACRAMENTO, CALIFORNIA

AL-357 (FAA)



AIRPORT DIAGRAM

09239

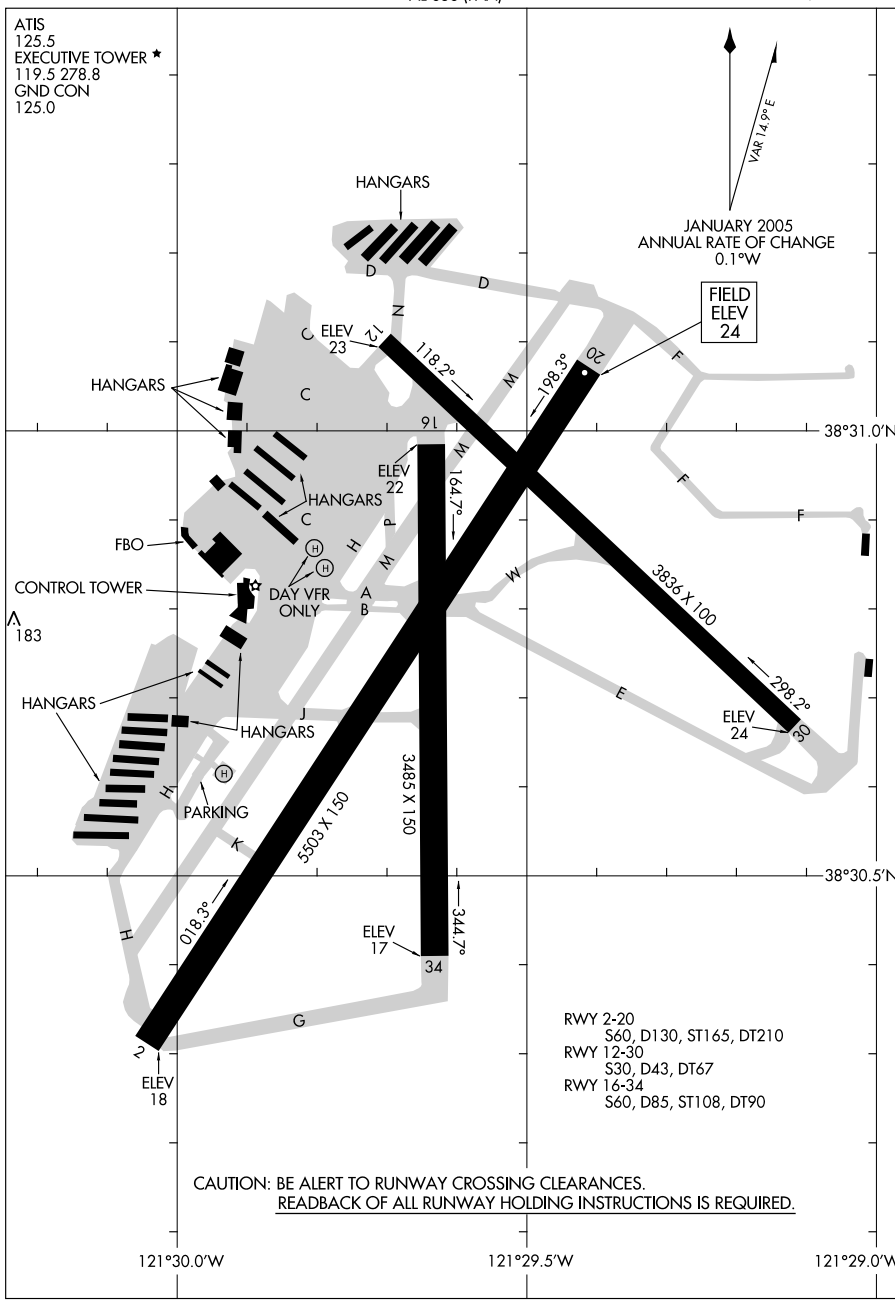
SACRAMENTO, CALIFORNIA
SACRAMENTO/ MC CLELLAN AIRFIELD (MCC)

09239

AIRPORT DIAGRAM

AL-358 (FAA)

SACRAMENTO EXECUTIVE (SAC)
SACRAMENTO, CALIFORNIA



AIRPORT DIAGRAM

09239

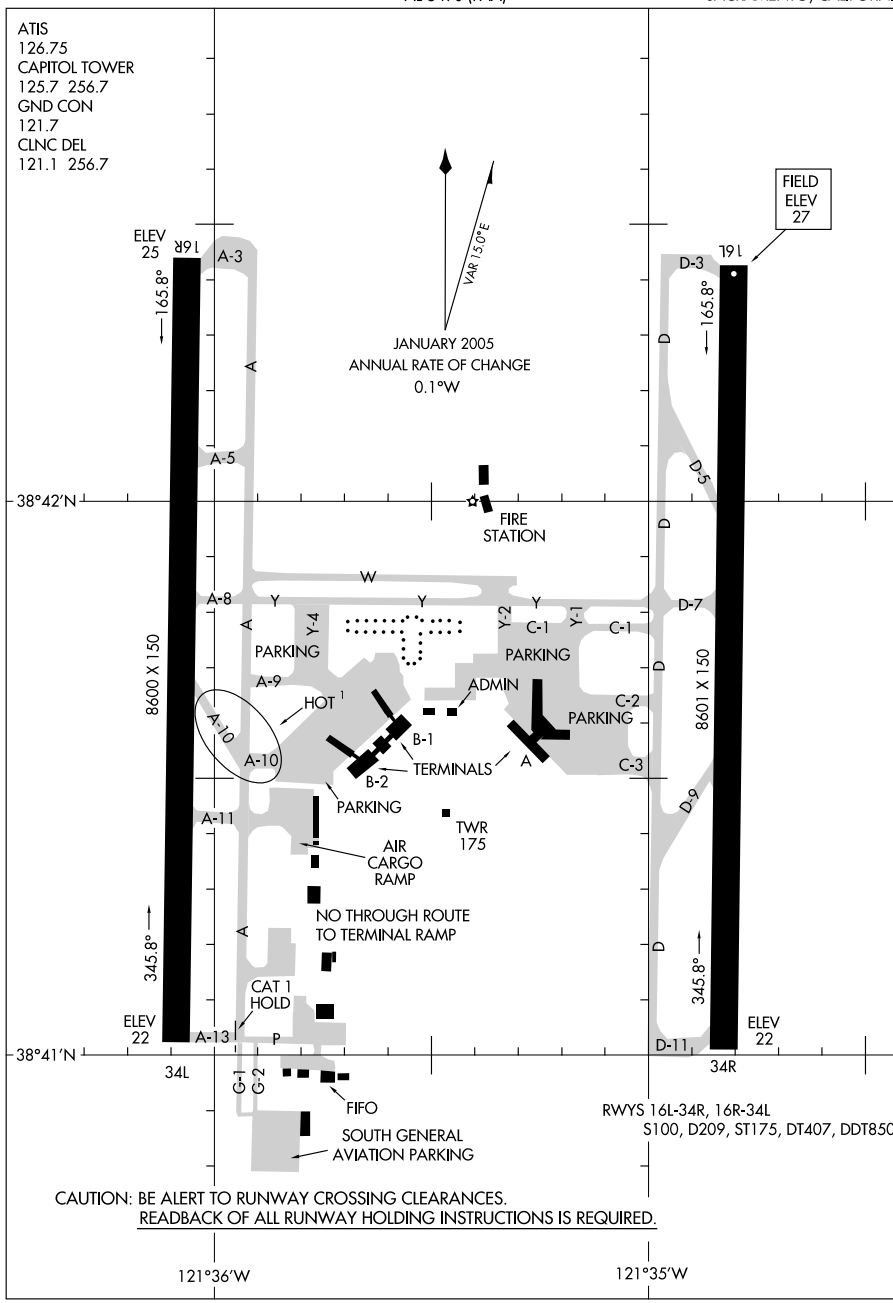
SACRAMENTO, CALIFORNIA
SACRAMENTO EXECUTIVE (SAC)

10042

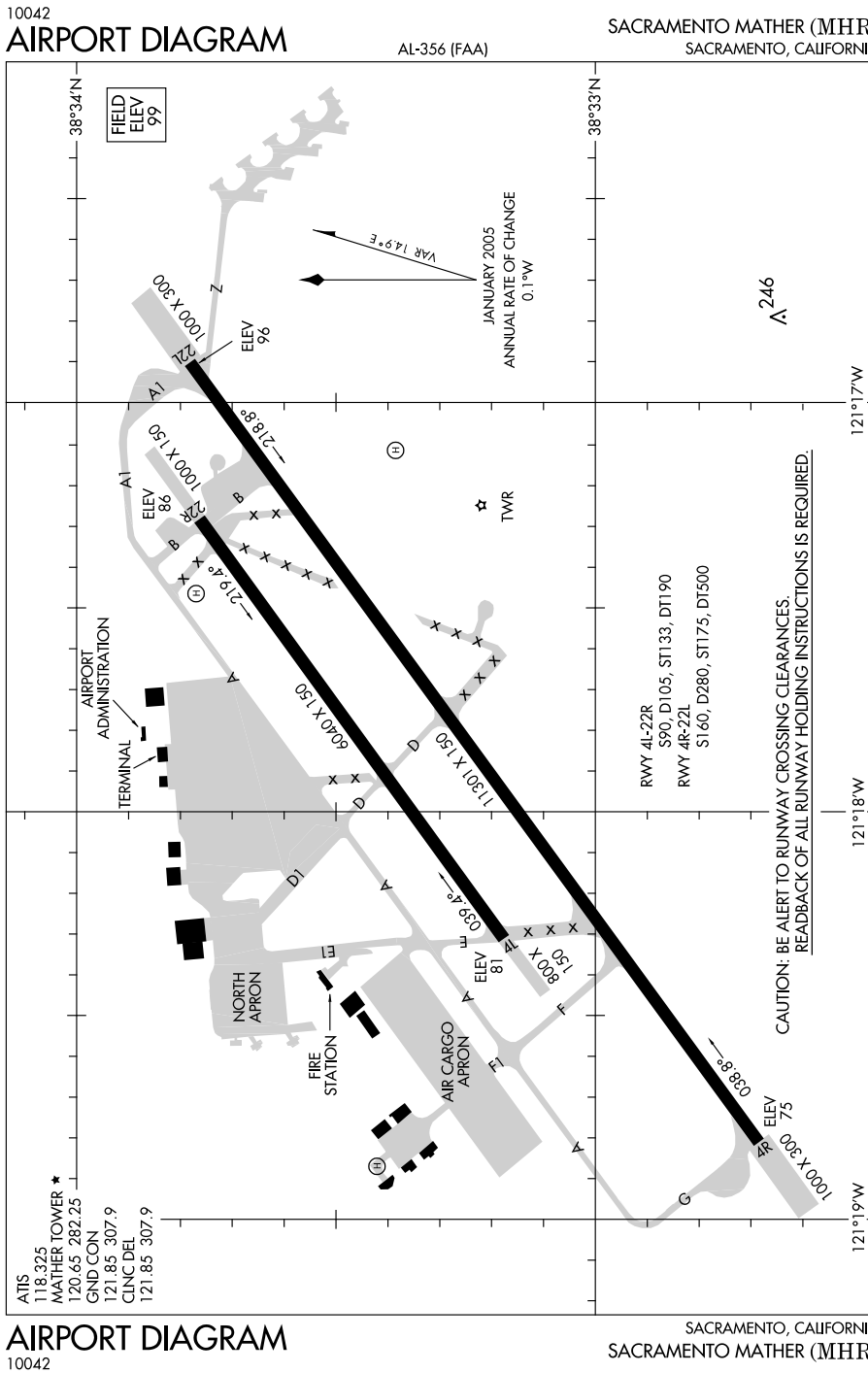
AIRPORT DIAGRAM

AL-5490 (FAA)

SACRAMENTO INTL (SMF)
SACRAMENTO, CALIFORNIA



AIRPORT DIAGRAM
10042
SACRAMENTO, CALIFORNIA
SACRAMENTO INTL (SMF)

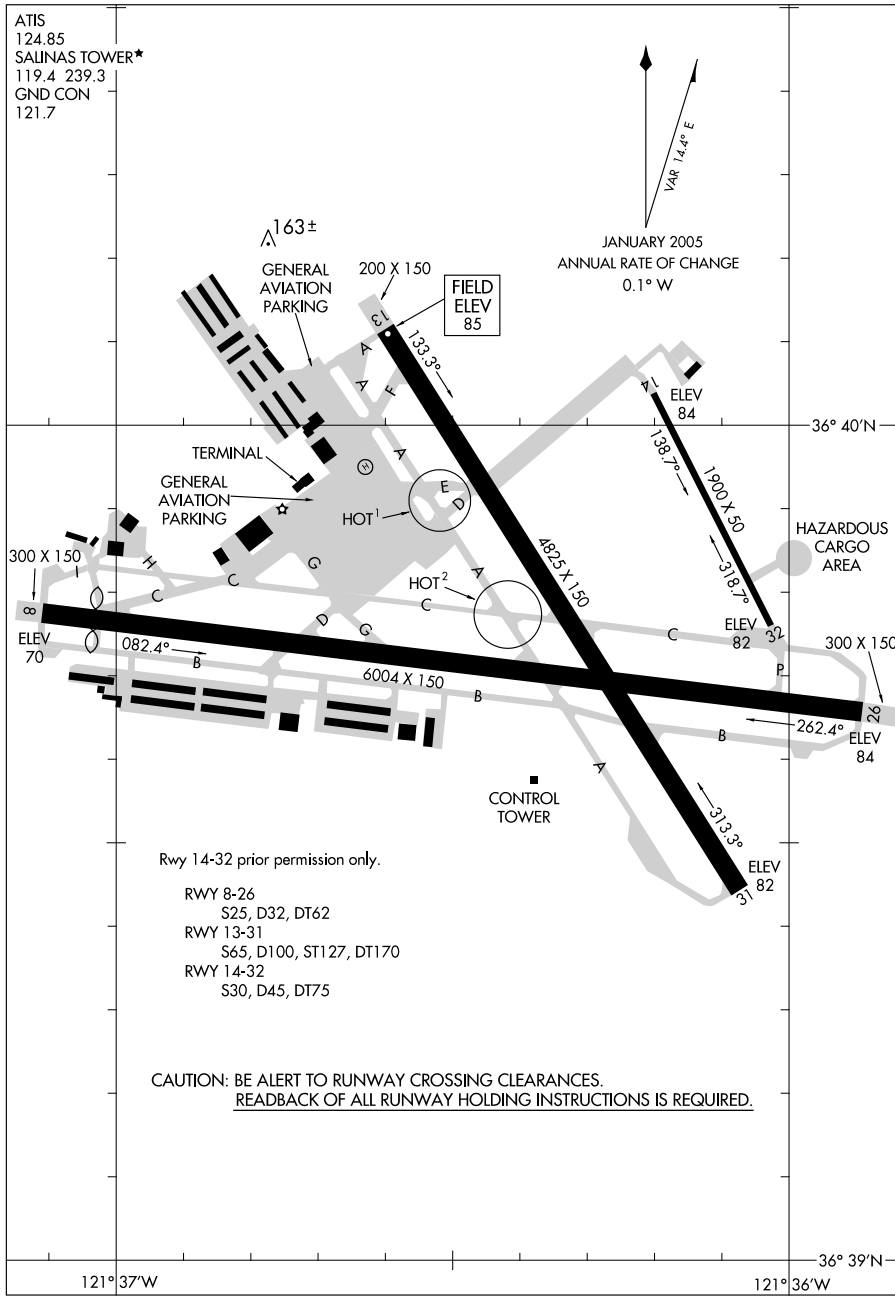

10042
AIRPORT DIAGRAM
AL-356 (FAA)
SACRAMENTO MATHER (MHR)
SACRAMENTO, CALIFORNIA
38°34'N
38°33'N
121°17'W
121°18'W
121°19'W
FIELD ELEV 99
ELEV 96
ELEV 86
ELEV 81
ELEV 75
22L
22R
4L
4R
1000 X 300
1000 X 150
6040 X 150
11301 X 150
800 X 150
218.8°
219.4°
039.4°
038.8°
VAR 14.9°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
246
TWR
AIRPORT ADMINISTRATION
TERMINAL
NORTH APRON
AIR CARGO APRON
FIRE STATION
RWY 4L-22R
S90, D105, ST133, DT190
RWY 4R-22L
S160, D280, ST175, DT500
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
ATIS 118.325
MATHER TOWER ★ 120.65 282.25
GND CON 121.85 307.9
CLNC DEL 121.85 307.9
AIRPORT DIAGRAM
10042
SACRAMENTO, CALIFORNIA
SACRAMENTO MATHER (MHR)

09295

AIRPORT DIAGRAM

AL-363 (FAA)

SALINAS MUNI (SNS)
SALINAS, CALIFORNIA



AIRPORT DIAGRAM

09295

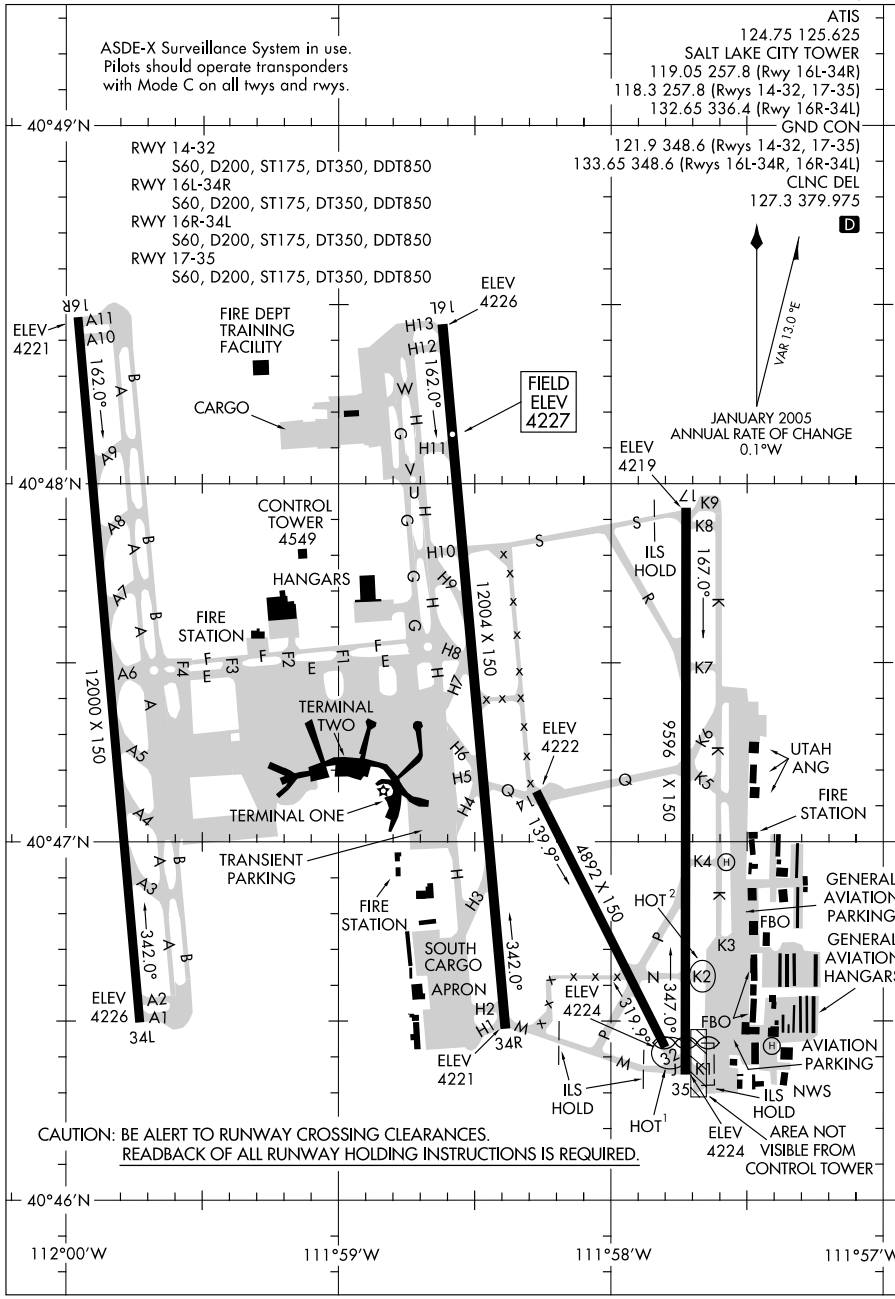
SALINAS, CALIFORNIA
SALINAS MUNI (SNS)

09351

AIRPORT DIAGRAM

AL-365 (FAA)

SALT LAKE CITY INTL (SLC)
SALT LAKE CITY, UTAH



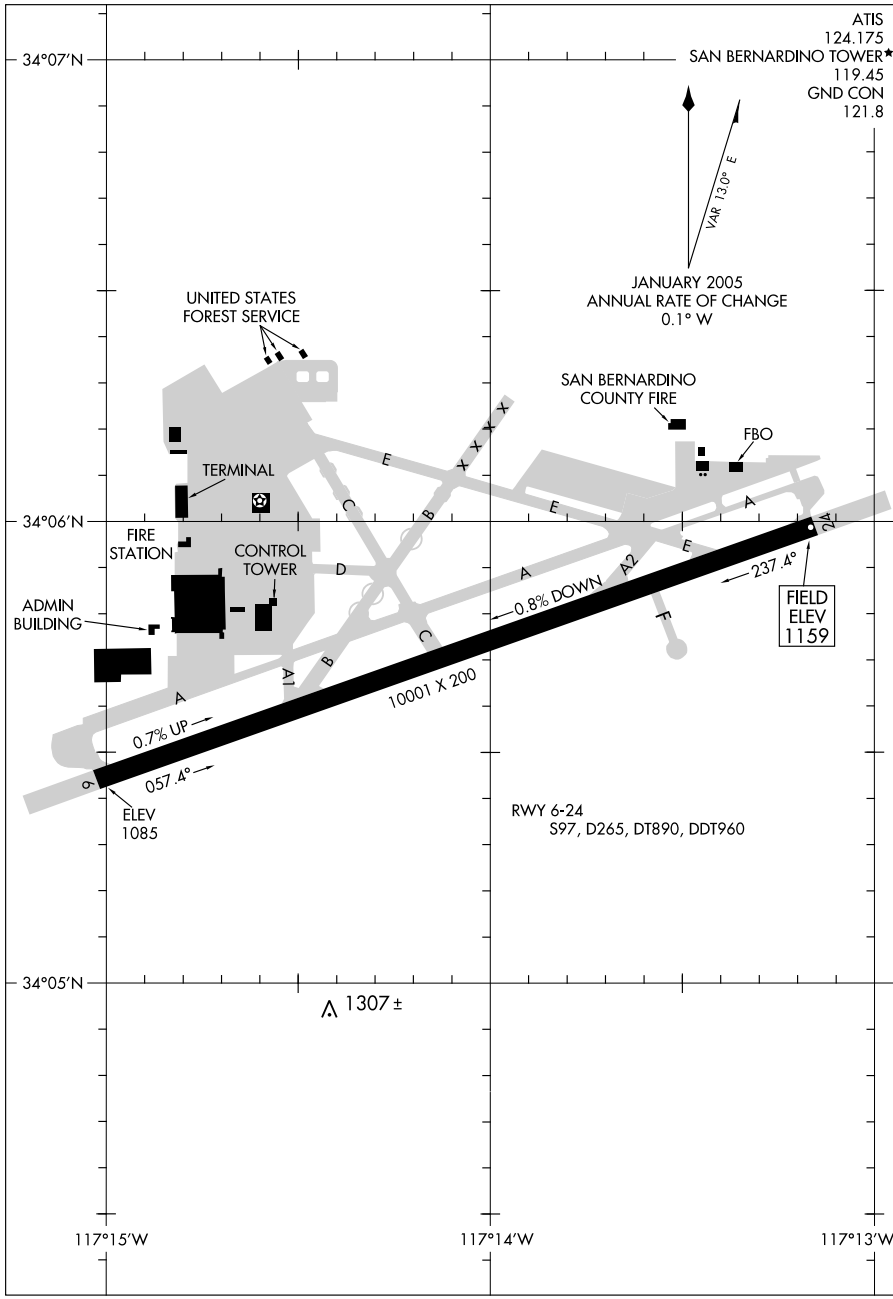
AIRPORT DIAGRAM
09351
SALT LAKE CITY, UTAH
SALT LAKE CITY INTL (SLC)

09071

AIRPORT DIAGRAM

AL-547 (FAA)

SAN BERNARDINO INTL (SBD)
SAN BERNARDINO, CALIFORNIA



AIRPORT DIAGRAM

09071

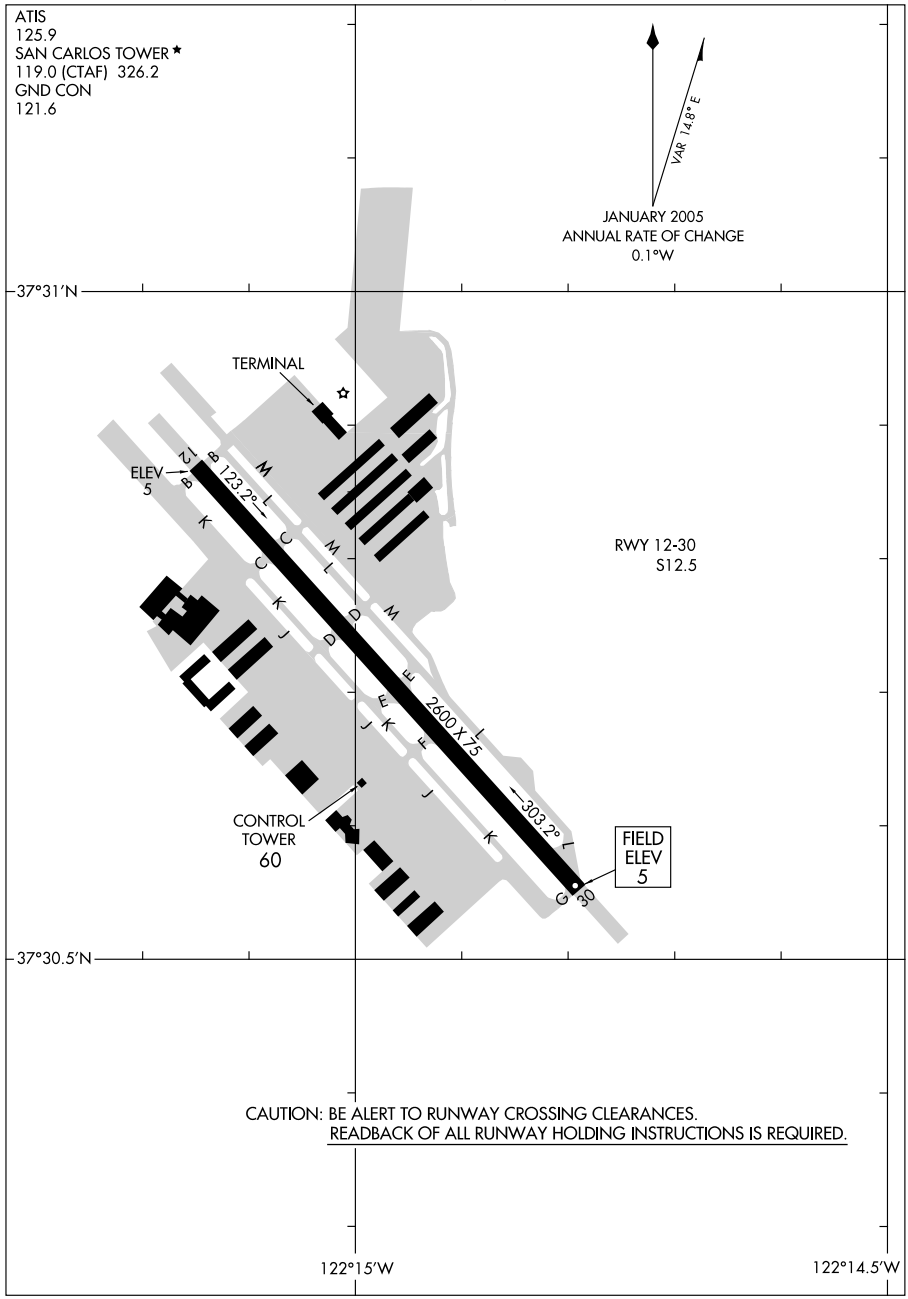
SAN BERNARDINO, CALIFORNIA
SAN BERNARDINO INTL (SBD)

08157

AIRPORT DIAGRAM

SAN CARLOS (SQL)
SAN CARLOS, CALIFORNIA

AL-9219 (FAA)



AIRPORT DIAGRAM

08157

SAN CARLOS, CALIFORNIA
SAN CARLOS (SQL)

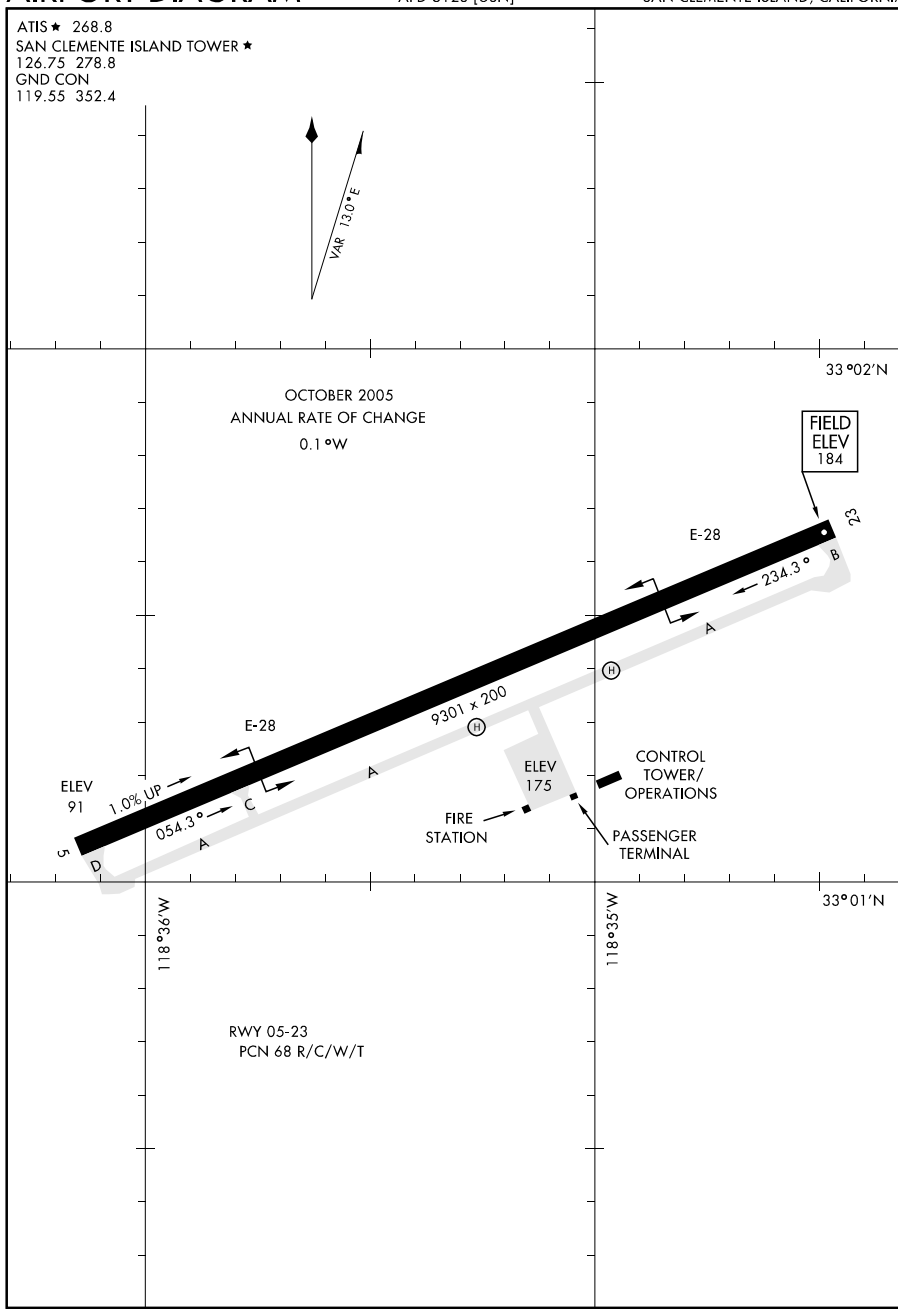
05300

AIRPORT DIAGRAM

SAN CLEMENTE ISLAND NALF (FREDERICK SHERMAN FLD) (NUC)

AFD-5126 [USN]

SAN CLEMENTE ISLAND, CALIFORNIA



AIRPORT DIAGRAM

SAN CLEMENTE ISLAND, CALIFORNIA

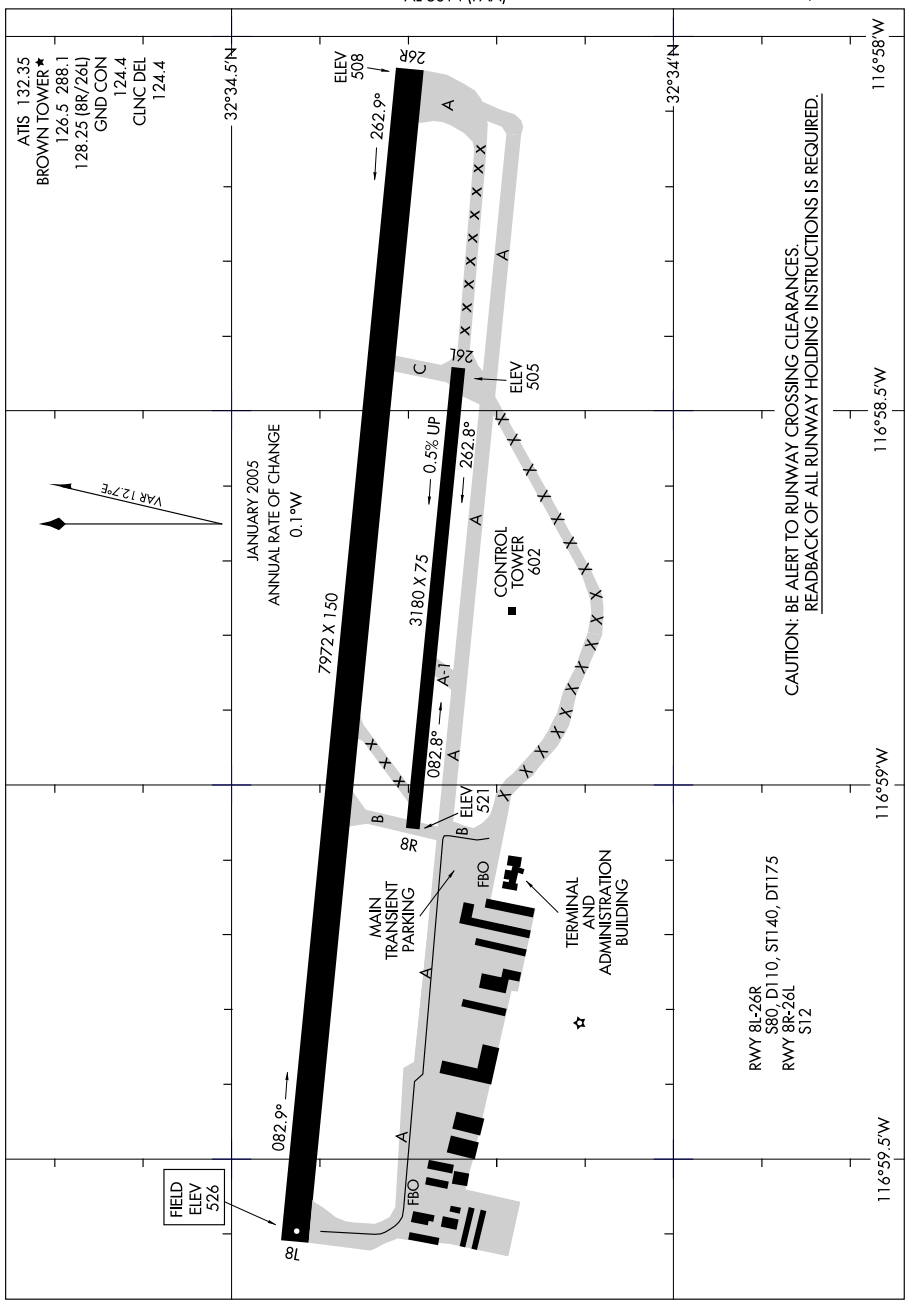
SAN CLEMENTE ISLAND NALF (FREDERICK SHERMAN FLD) (NUC)

08325

AIRPORT DIAGRAM

SAN DIEGO/ BROWN FIELD MUNI (SDM)
SAN DIEGO, CALIFORNIA

AL-5814 (FAA)



AIRPORT DIAGRAM

08325

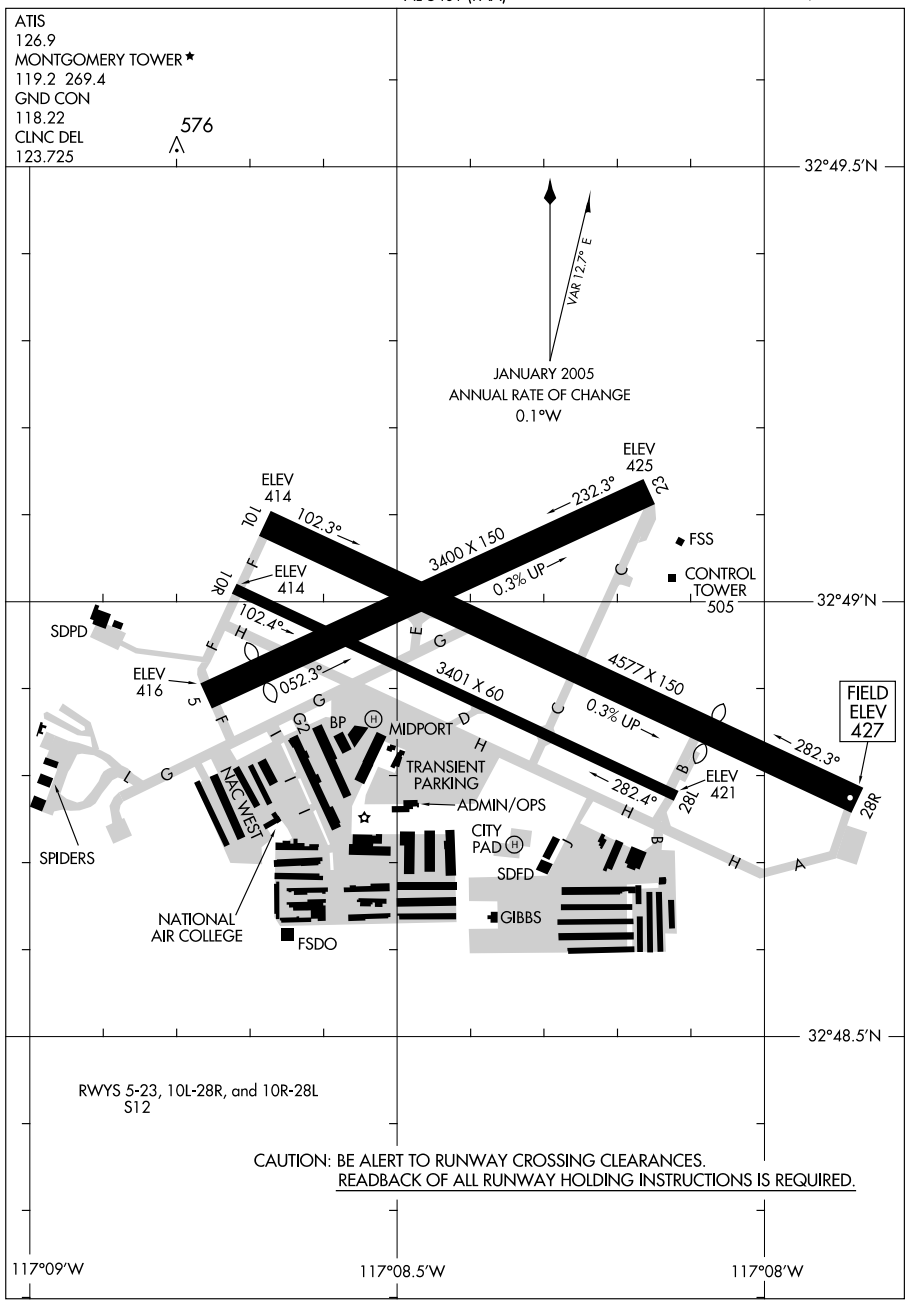
SAN DIEGO, CALIFORNIA
SAN DIEGO/ BROWN FIELD MUNI (SDM)

09071

AIRPORT DIAGRAM

SAN DIEGO/MONTGOMERY FIELD (MYF)
SAN DIEGO, CALIFORNIA

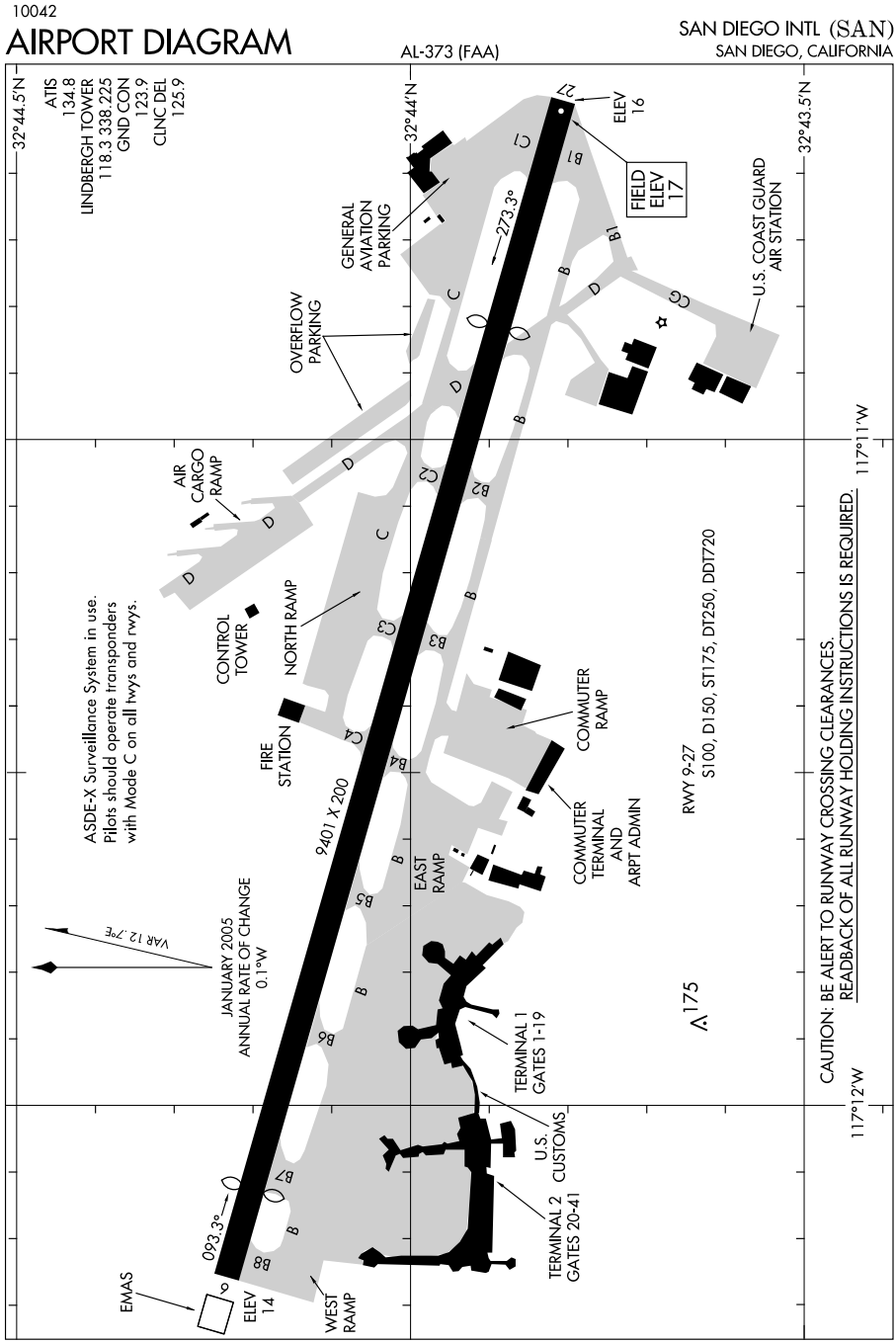
AL-5401 (FAA)



AIRPORT DIAGRAM

09071

SAN DIEGO, CALIFORNIA
SAN DIEGO/MONTGOMERY FIELD (MYF)

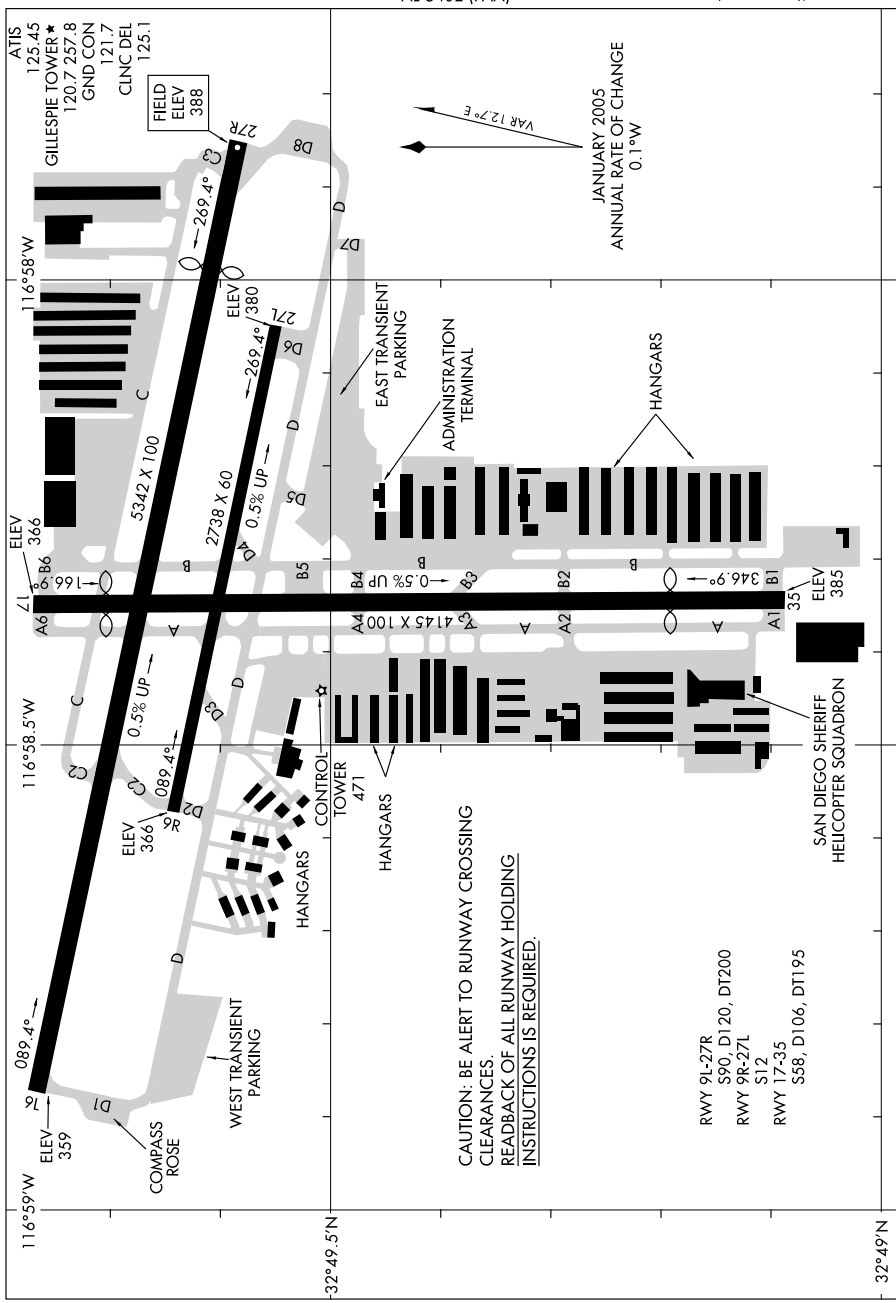

10042
AIRPORT DIAGRAM
SAN DIEGO INTL (SAN)
SAN DIEGO, CALIFORNIA
AL-373 (FAA)
32°44.5'N
32°44'N
32°43.5'N
117°11'W
117°12'W
ATIS 134.8
LINDBERGH TOWER 118.3 338.225
GND CON 123.9
CLNC DEL 125.9
ASDE-X Surveillance System in use.
Pilots should operate transponders with Mode C on all rwys and rwys.
JANUARY 2005
ANNUAL RATE OF CHANGE 0.1°W
VAR 12.7°E
GENERAL AVIATION PARKING
OVERFLOW PARKING
AIR CARGO RAMP
CONTROL TOWER
NORTH RAMP
FIRE STATION
EAST RAMP
COMMUTER RAMP
COMMUTER TERMINAL AND ARPT ADMIN
TERMINAL 1 GATES 1-19
U.S. CUSTOMS
TERMINAL 2 GATES 20-41
WEST RAMP
EMAS
ELEV 14
ELEV 16
FIELD ELEV 17
U.S. COAST GUARD AIR STATION
9401 X 200
273.3°
093.3°
RWY 9-27
S100, D150, ST175, DT250, DDT720
A175
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
AIRPORT DIAGRAM
10042
SAN DIEGO, CALIFORNIA
SAN DIEGO INTL (SAN)

09071

AIRPORT DIAGRAM

SAN DIEGO/GILLESPIE FIELD (SEE)
SAN DIEGO (EL CAJON), CALIFORNIA

AL-5402 (FAA)



AIRPORT DIAGRAM
09071

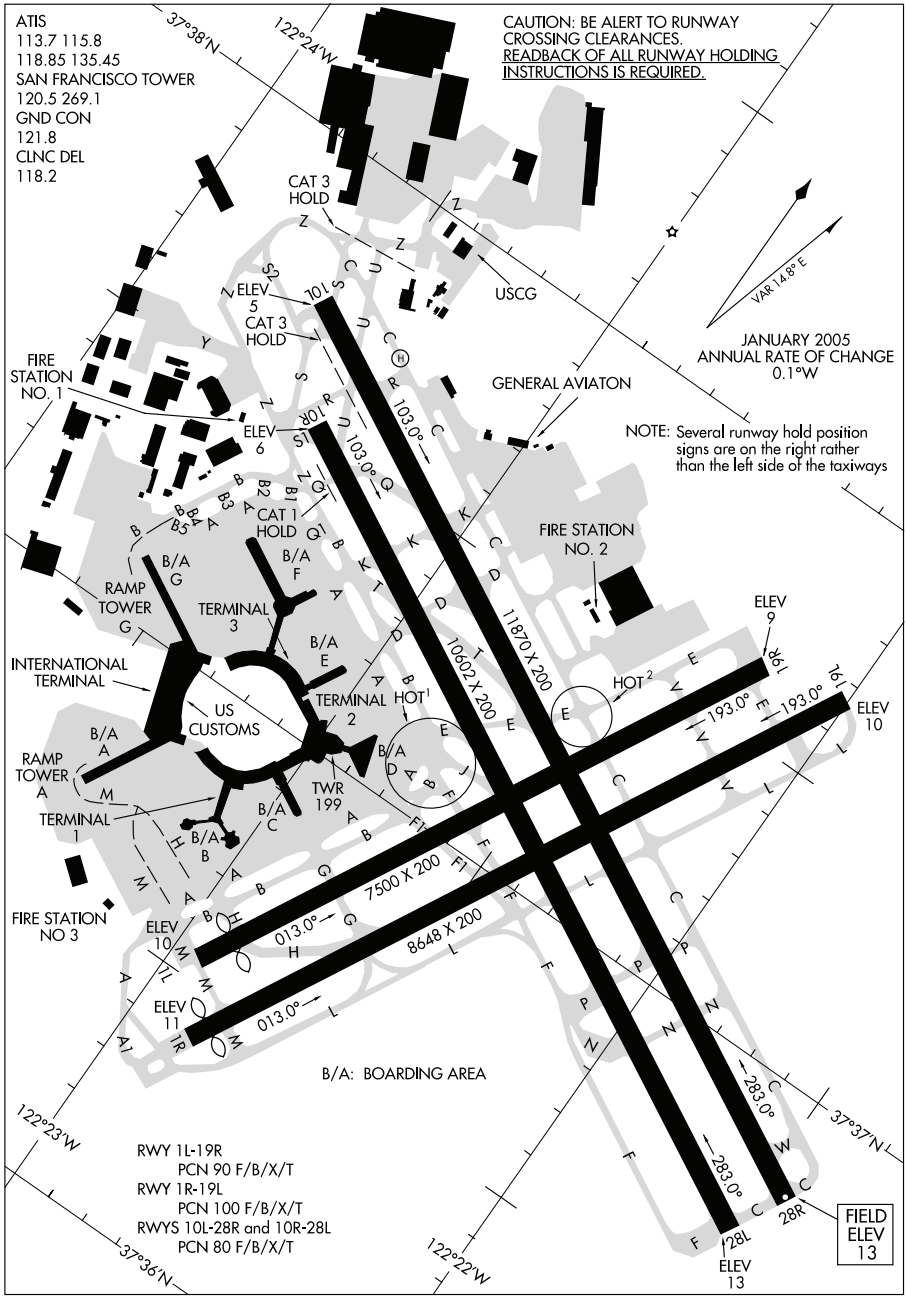
SAN DIEGO (EL CAJON), CALIFORNIA
SAN DIEGO/GILLESPIE FIELD (SEE)

10098

AIRPORT DIAGRAM

AL-375 (FAA)

SAN FRANCISCO INTL (SFO)
SAN FRANCISCO, CALIFORNIA



AIRPORT DIAGRAM

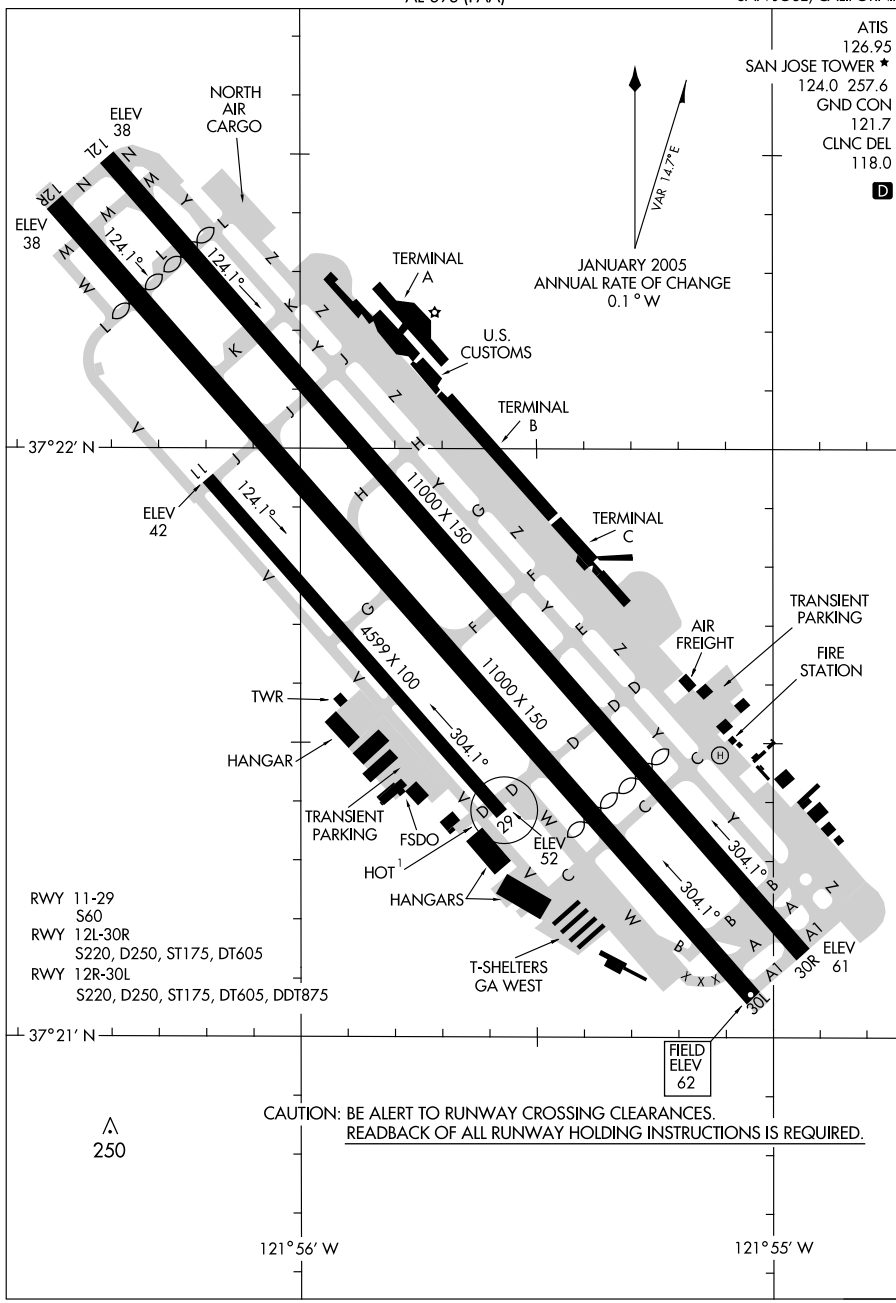
10098

SAN FRANCISCO, CALIFORNIA
SAN FRANCISCO INTL (SFO)

10098

AIRPORT DIAGRAM

SAN JOSE/ NORMAN Y. MINETA SAN JOSE INTL (SJC)
AL-693 (FAA)
SAN JOSE, CALIFORNIA



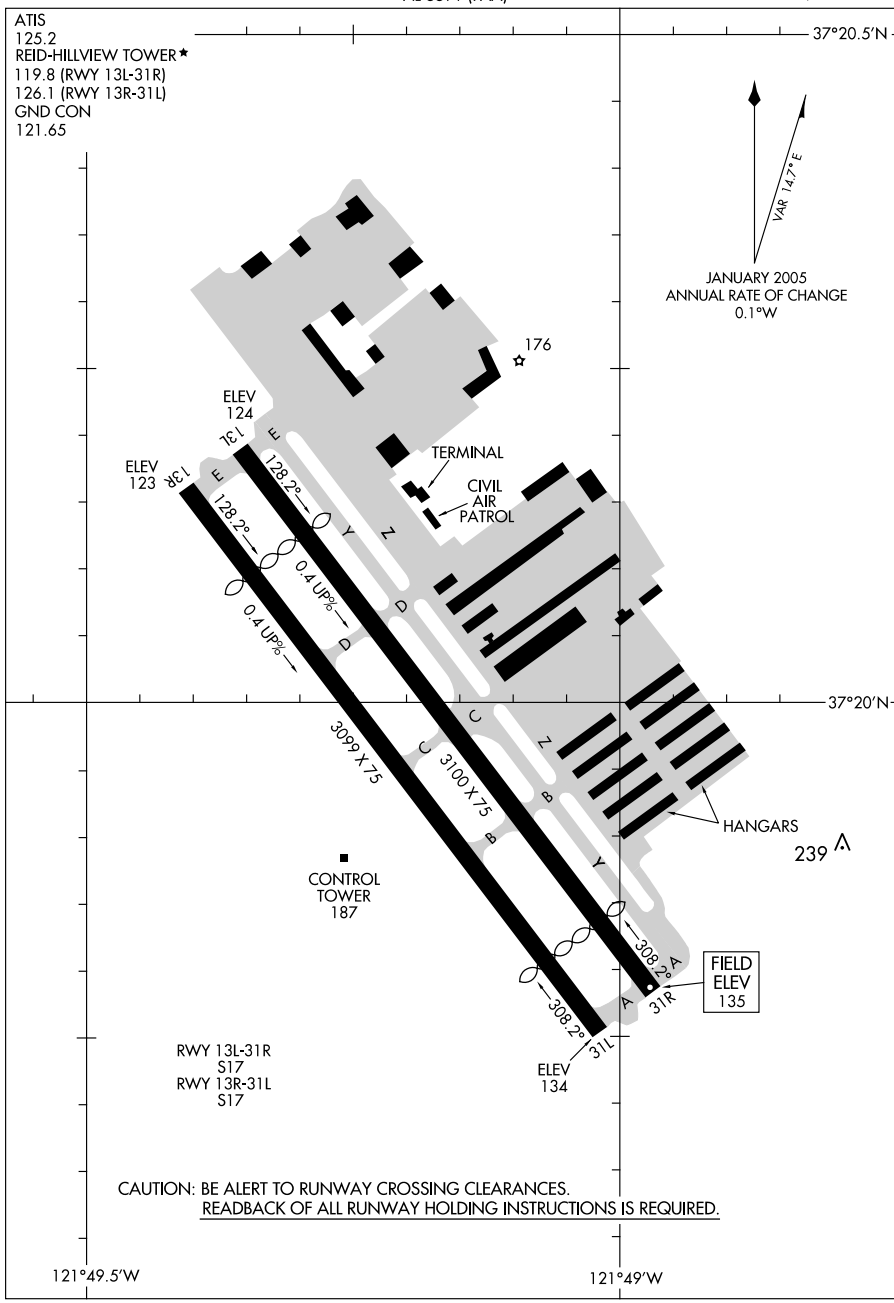
AIRPORT DIAGRAM
10098

SAN JOSE, CALIFORNIA
SAN JOSE/ NORMAN Y. MINETA SAN JOSE INTL (SJC)

09071

AIRPORT DIAGRAM

SAN JOSE/REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)
AL-5591 (FAA)
SAN JOSE, CALIFORNIA



AIRPORT DIAGRAM

09071

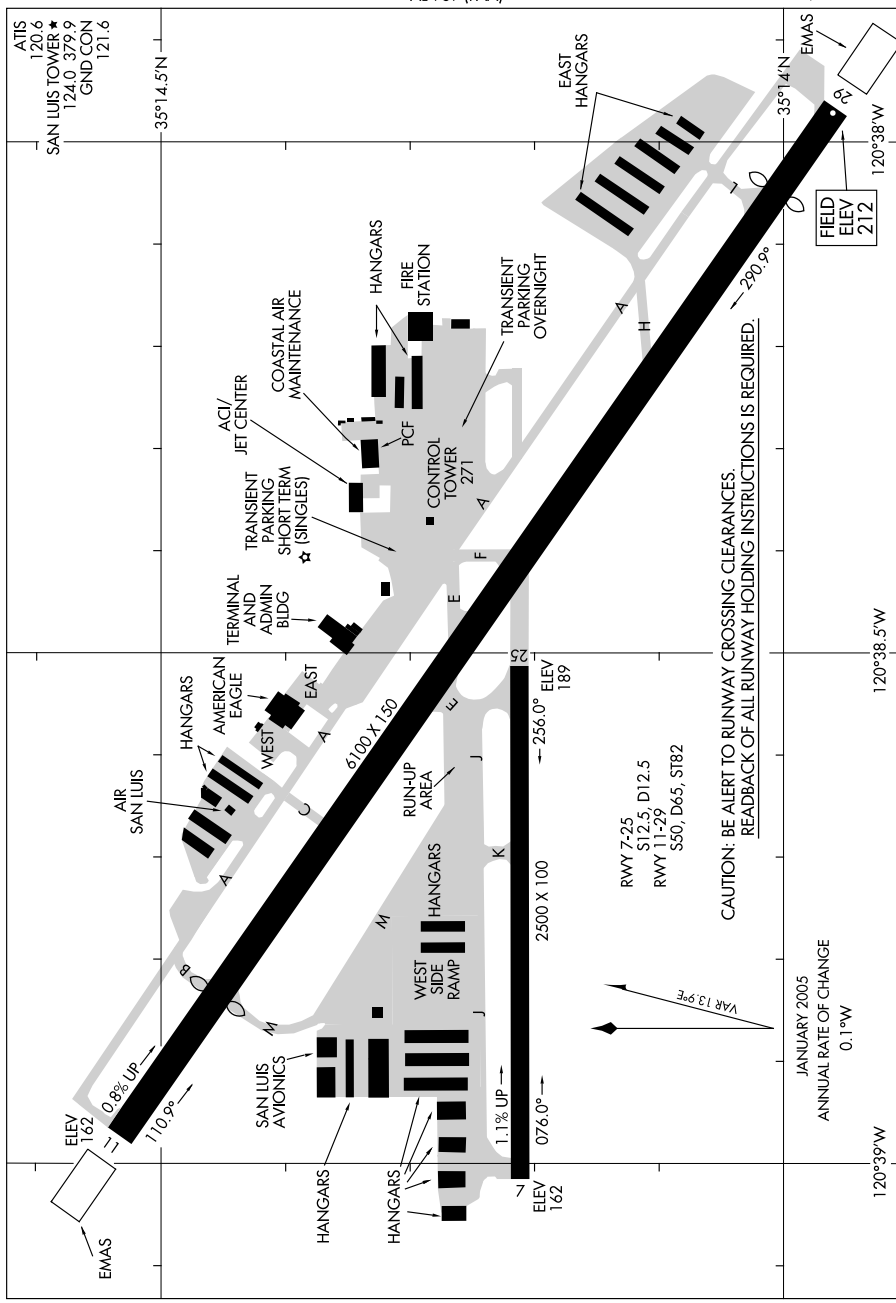
SAN JOSE, CALIFORNIA
SAN JOSE/REID-HILLVIEW OF SANTA CLARA COUNTY (RHV)

10042

AIRPORT DIAGRAM

AL-989 (FAA)

SAN LUIS COUNTY RGNL (SBP)
SAN LUIS OBISPO, CALIFORNIA



AIRPORT DIAGRAM
10042
SAN LUIS OBISPO, CALIFORNIA
SAN LUIS COUNTY RGNL (SBP)

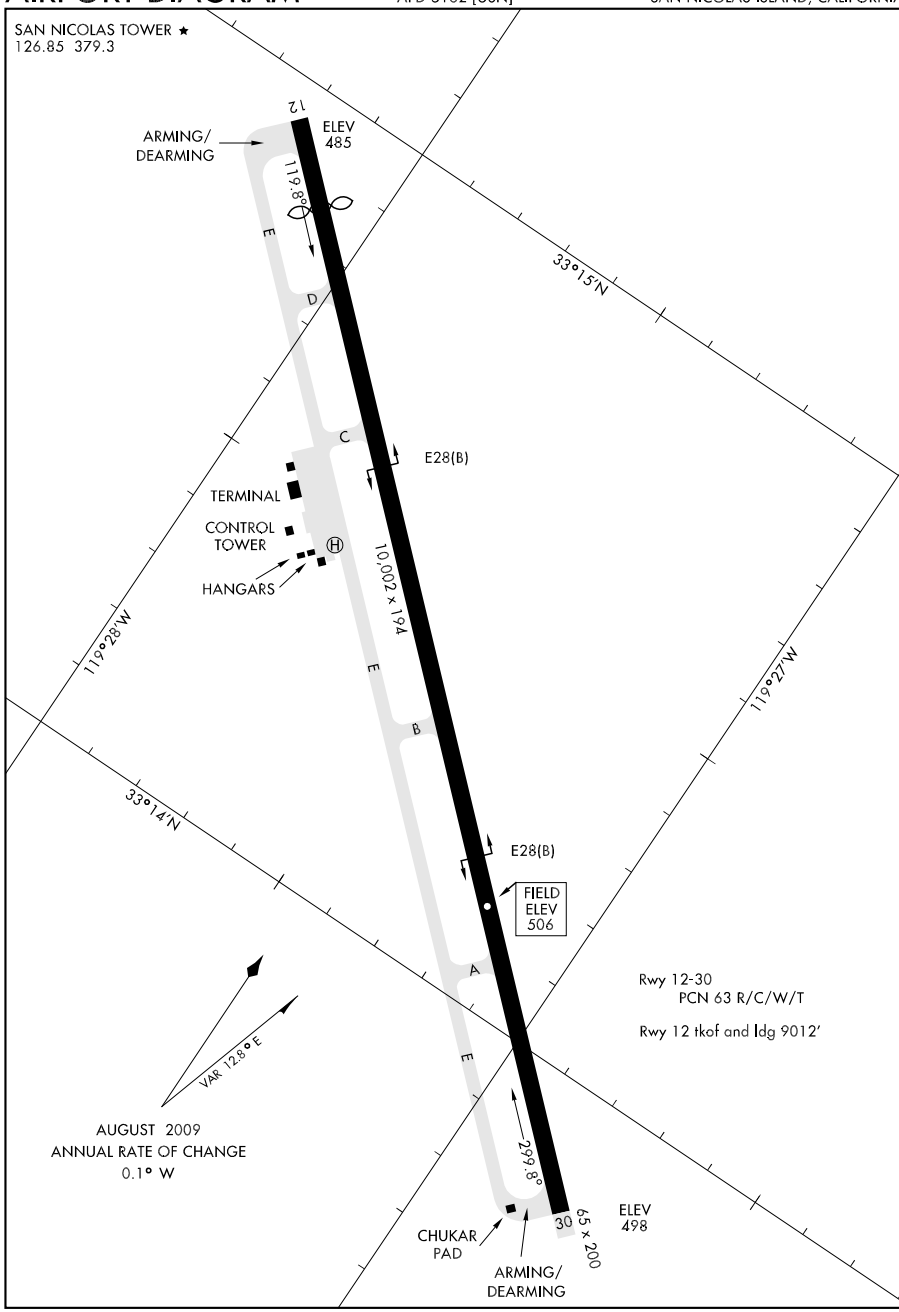
09239

AIRPORT DIAGRAM

SAN NICOLAS ISLAND NOLF (KNSI)

AFD-5162 [USN]

SAN NICOLAS ISLAND, CALIFORNIA



AIRPORT DIAGRAM

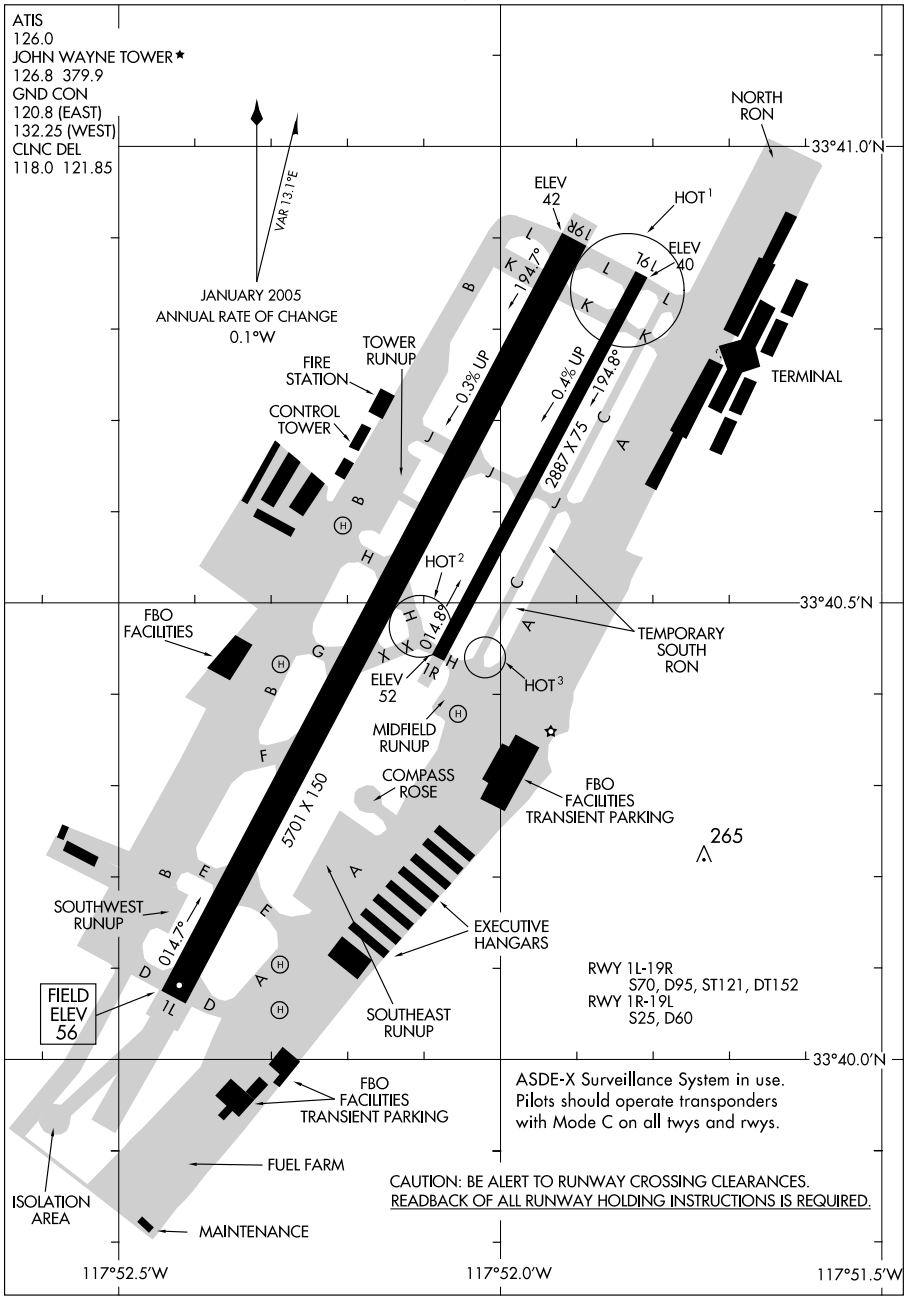
SAN NICOLAS ISLAND, CALIFORNIA

SAN NICOLAS ISLAND NOLF (KNSI)

09351

AIRPORT DIAGRAM

SANTA ANA/JOHN WAYNE ARPT-ORANGE COUNTY (SNA)
AL-377 (FAA)
SANTA ANA, CALIFORNIA



AIRPORT DIAGRAM

SANTA ANA, CALIFORNIA
SANTA ANA/JOHN WAYNE ARPT-ORANGE COUNTY (SNA)

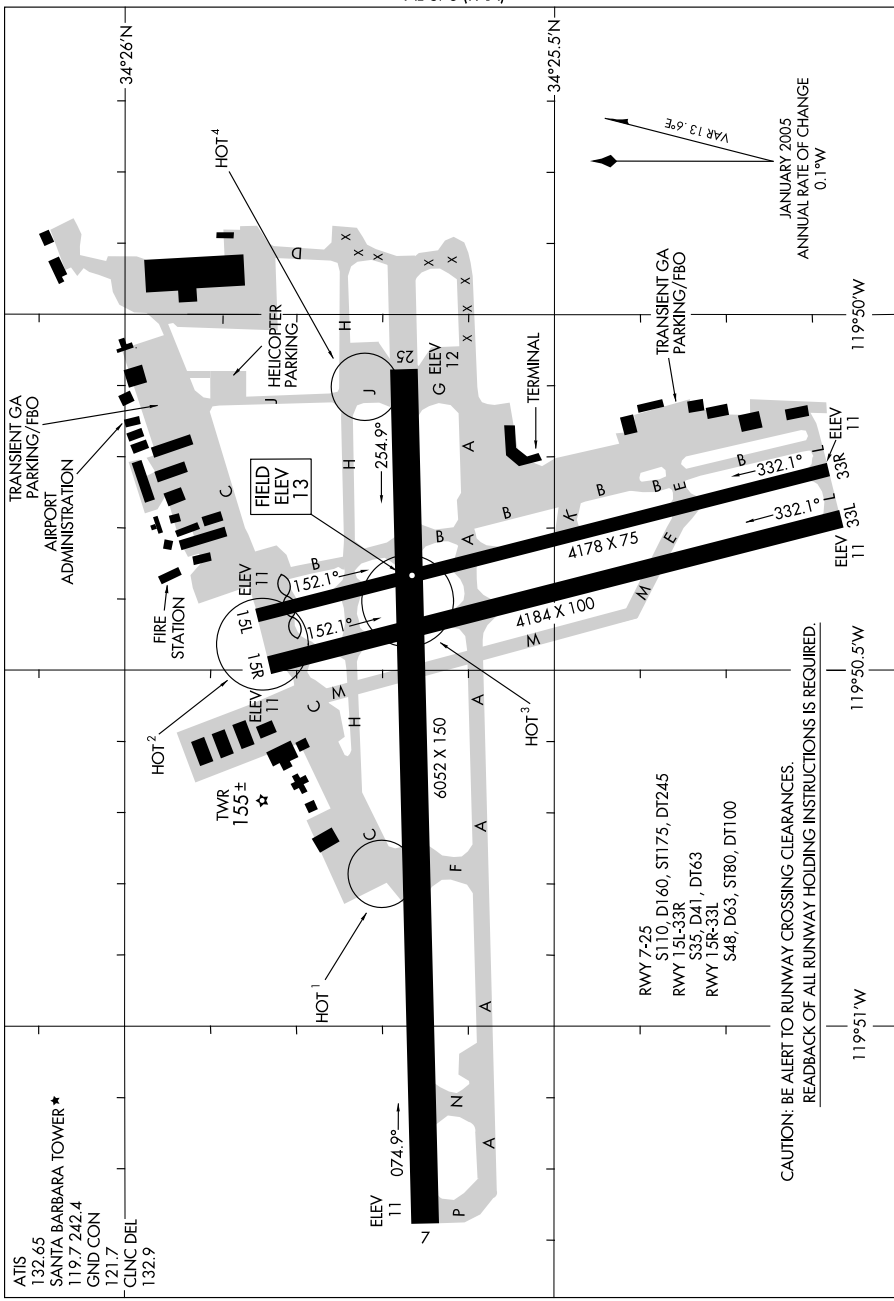
09351

09295

AIRPORT DIAGRAM

AL-378 (FAA)

SANTA BARBARA MUNI (SBA)
SANTA BARBARA, CALIFORNIA



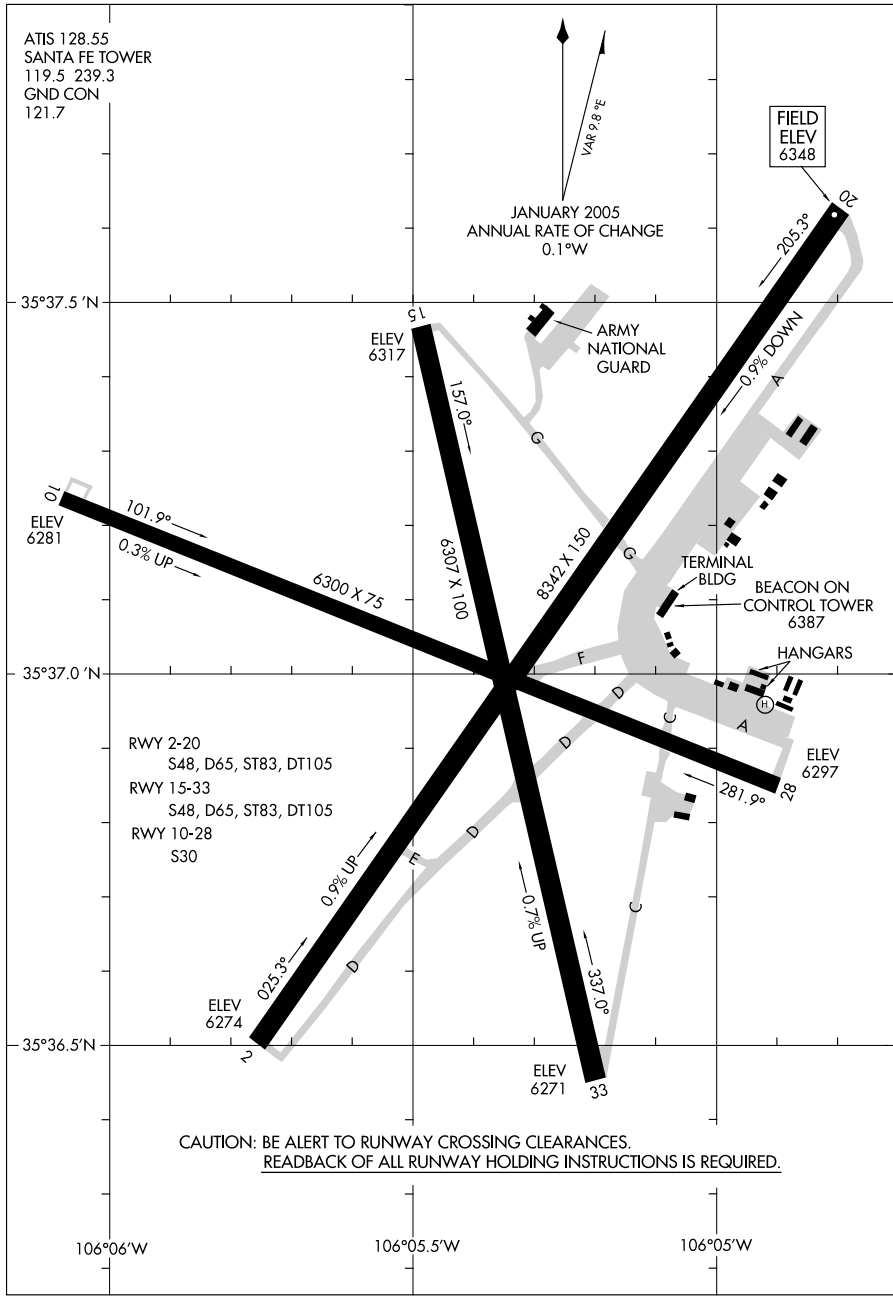
AIRPORT DIAGRAM
09295
SANTA BARBARA, CALIFORNIA
SANTA BARBARA MUNI (SBA)

08101

AIRPORT DIAGRAM

AL-548 (FAA)

SANTA FE MUNI (SAF)
SANTA FE, NEW MEXICO



AIRPORT DIAGRAM

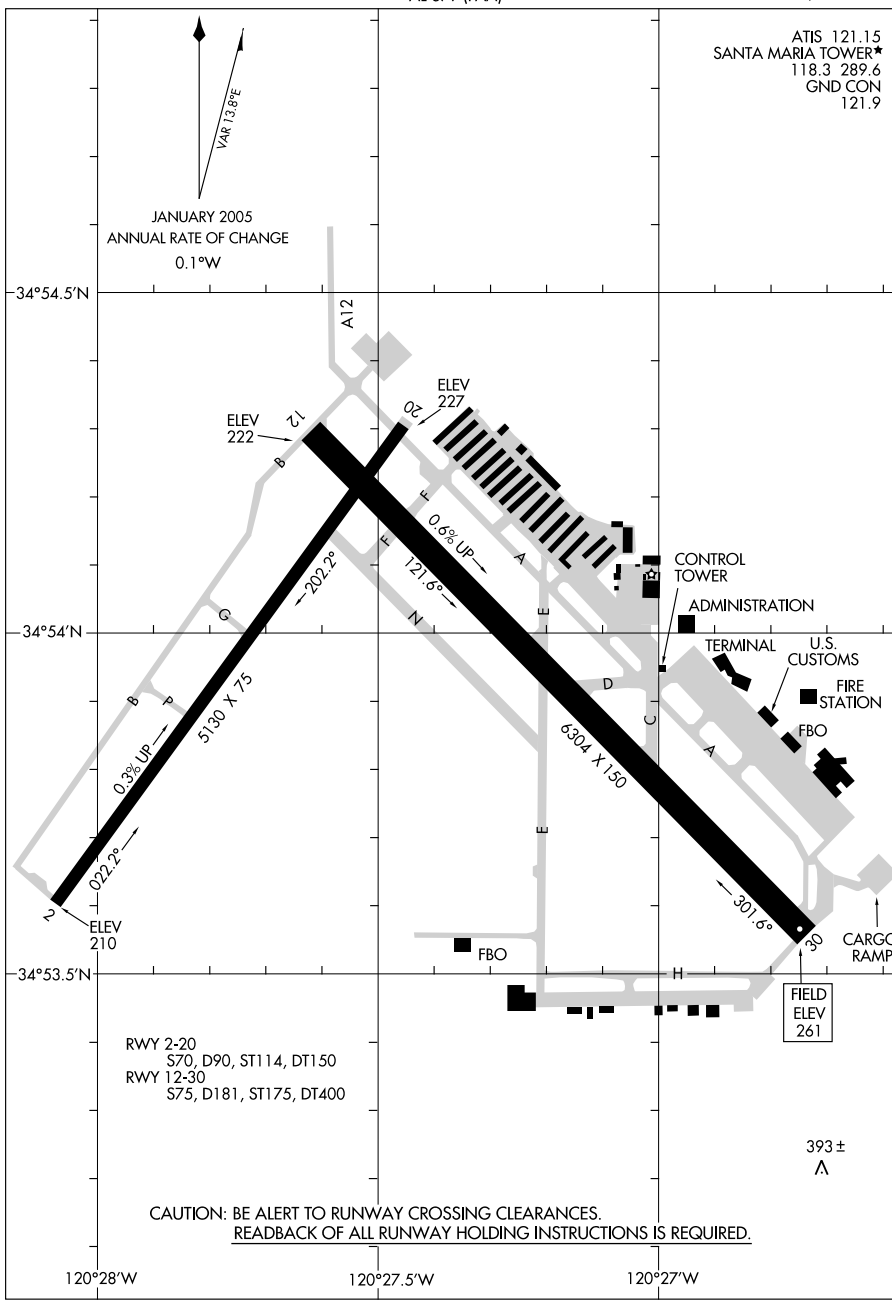
08101

SANTA FE, NEW MEXICO
SANTA FE MUNI (SAF)

07074

AIRPORT DIAGRAM

SANTA MARIA PUBLIC/CAPTAIN G. ALLAN HANCOCK FIELD (SMX)
AL-379 (FAA)
SANTA MARIA, CALIFORNIA



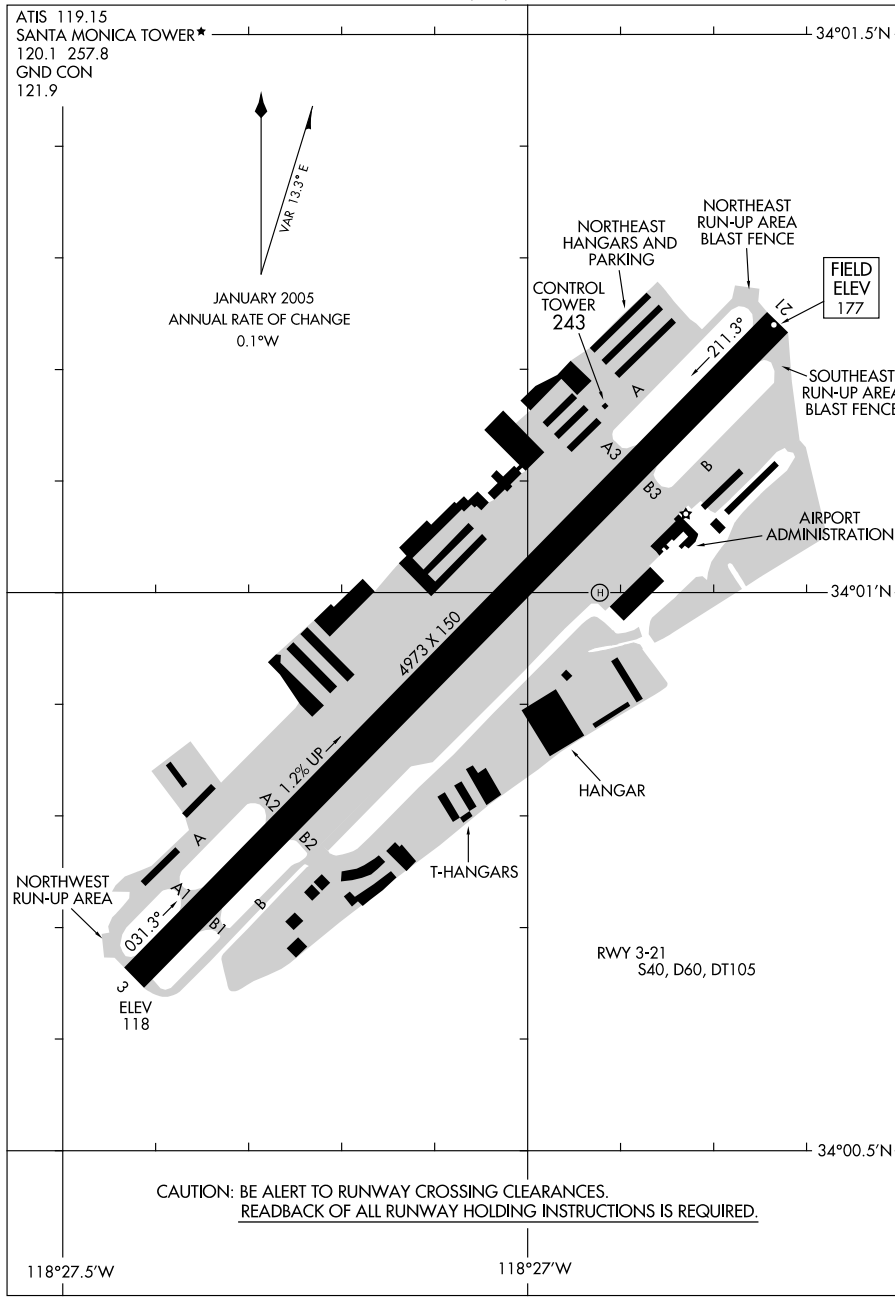
AIRPORT DIAGRAM
SANTA MARIA, CALIFORNIA
SANTA MARIA PUBLIC/CAPTAIN G. ALLAN HANCOCK FIELD (SMX)
07074

06327

AIRPORT DIAGRAM

AL-5023 (FAA)

SANTA MONICA MUNI (SMO)
SANTA MONICA, CALIFORNIA



AIRPORT DIAGRAM

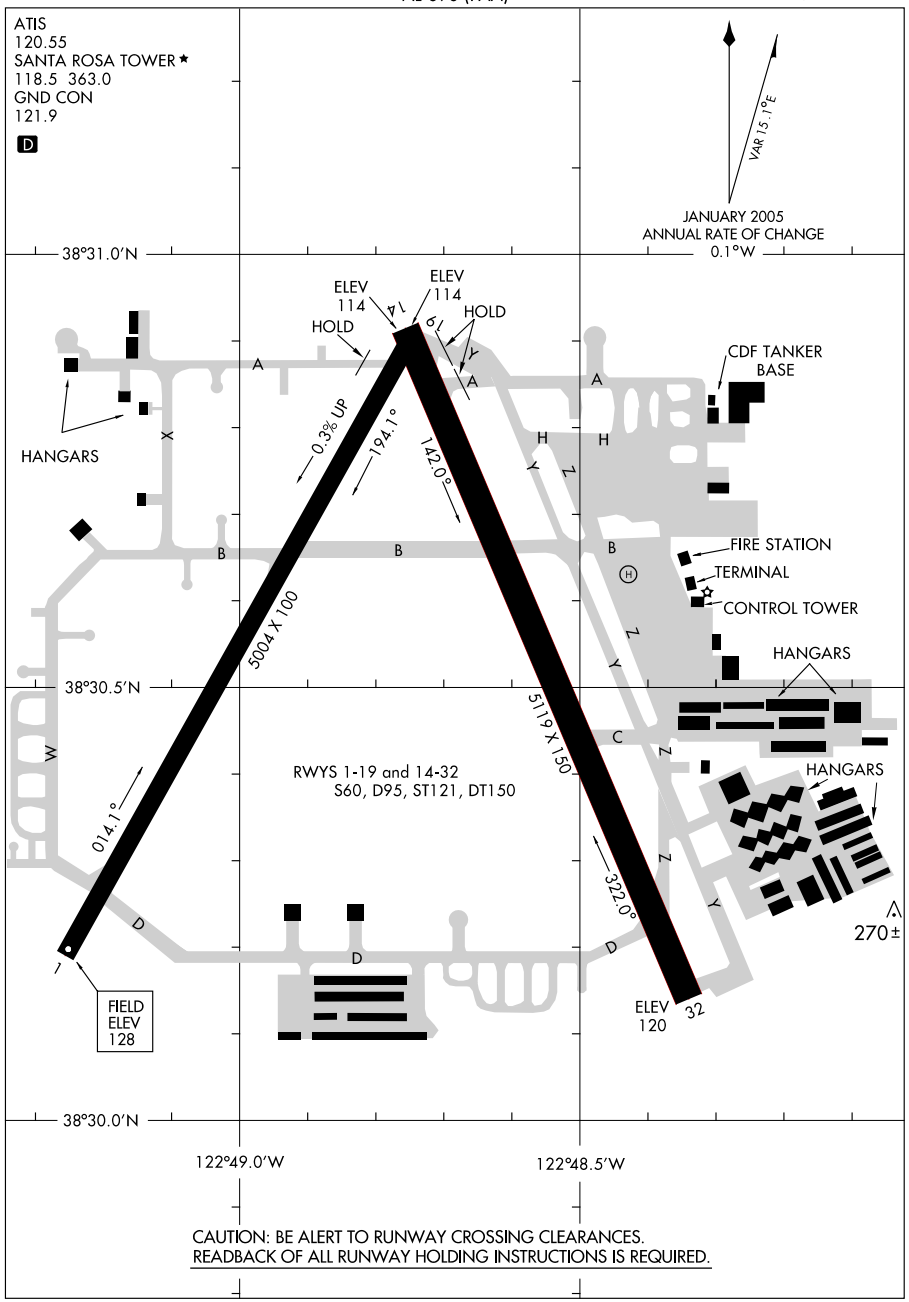
06327

SANTA MONICA, CALIFORNIA
SANTA MONICA MUNI (SMO)

09015

AIRPORT DIAGRAM

SANTA ROSA/ CHARLES M. SCHULZ-SONOMA COUNTY (STS)
AL-696 (FAA)
SANTA ROSA, CALIFORNIA



AIRPORT DIAGRAM

09015

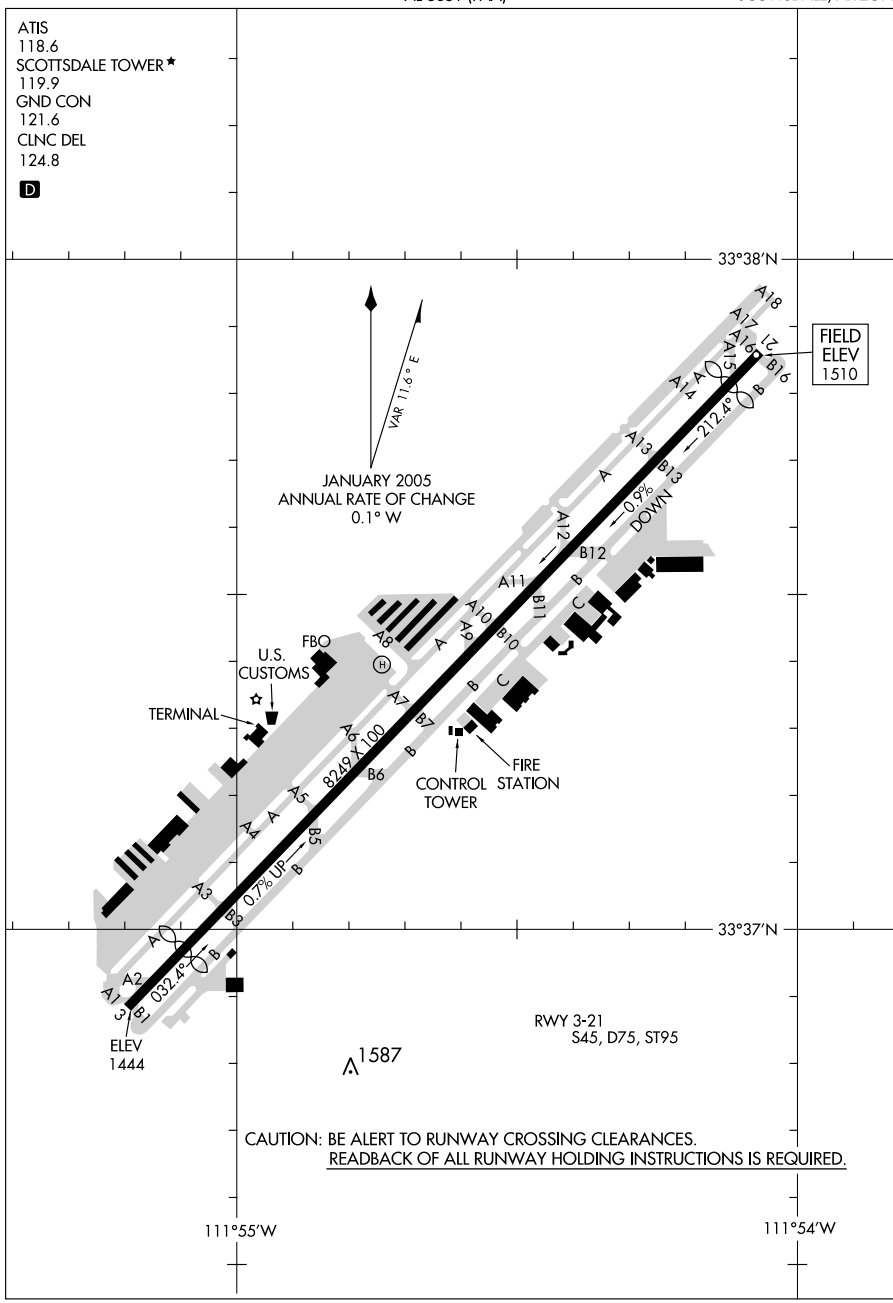
SANTA ROSA, CALIFORNIA
SANTA ROSA/ CHARLES M. SCHULZ-SONOMA COUNTY (STS)

10042

AIRPORT DIAGRAM

AL-5651 (FAA)

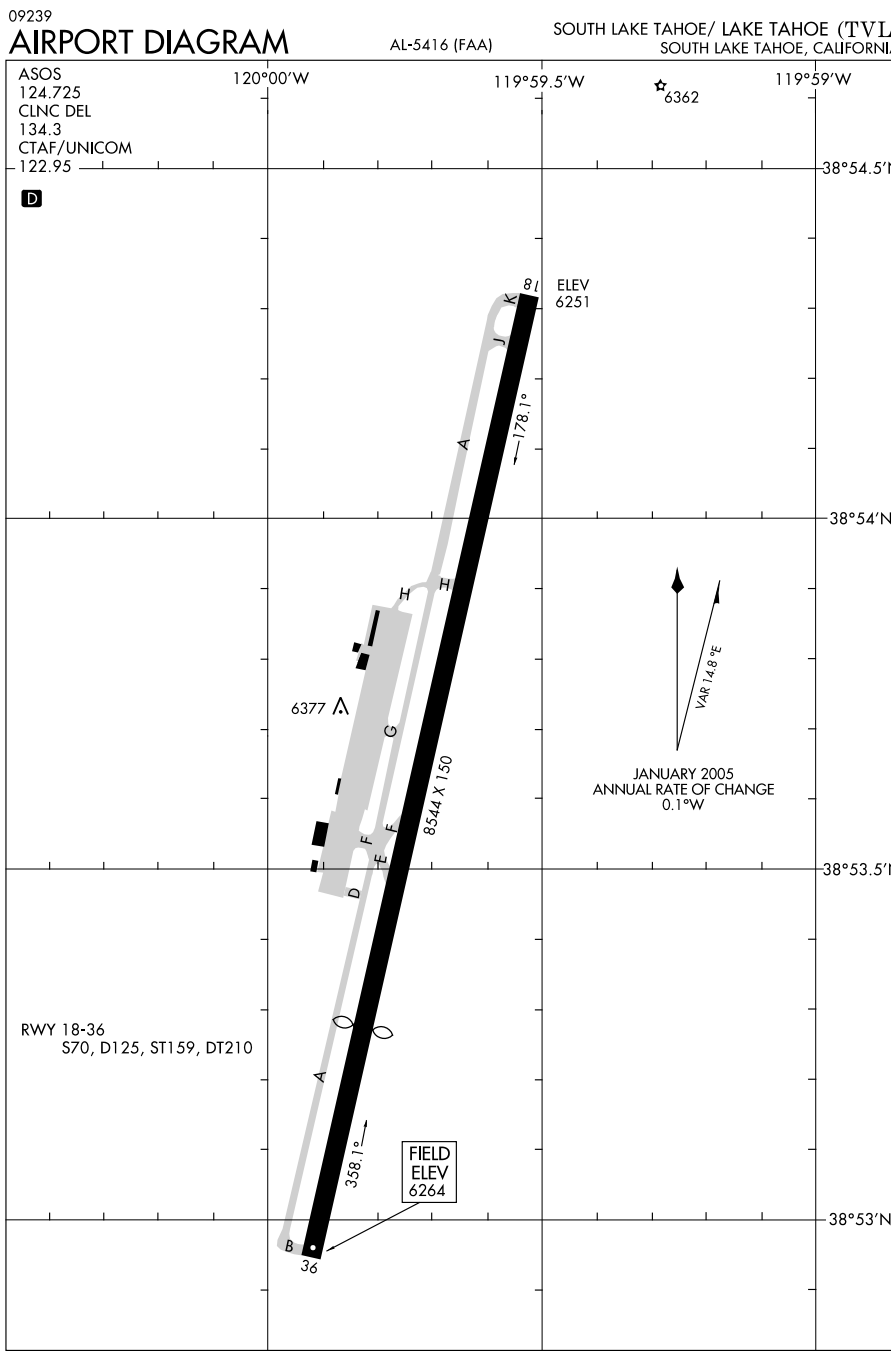
SCOTTSDALE (SDL)
SCOTTSDALE, ARIZONA



AIRPORT DIAGRAM

10042

SCOTTSDALE, ARIZONA
SCOTTSDALE (SDL)

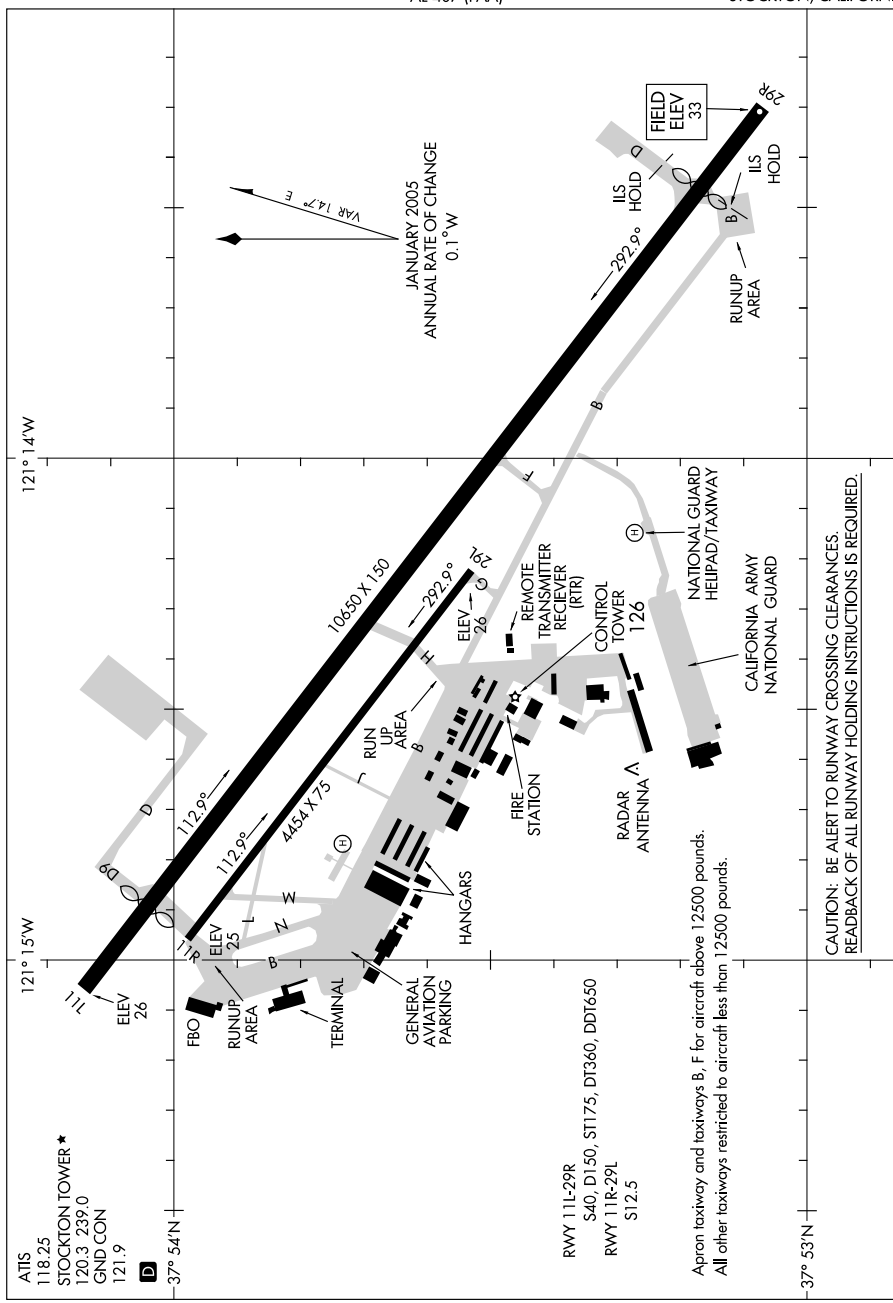

09239
AIRPORT DIAGRAM
AL-5416 (FAA)
SOUTH LAKE TAHOE/ LAKE TAHOE (TVL)
SOUTH LAKE TAHOE, CALIFORNIA
ASOS
124.725
CLNC DEL
134.3
CTAF/UNICOM
122.95
120°00'W
119°59.5'W
6362
119°59'W
38°54.5'N
D
ELEV
6251
81
K
J
A
178.1°
38°54'N
H
H
6377
G
8544 X 150
F
F
E
D
VAR 14.8°E
JANUARY 2005
ANNUAL RATE OF CHANGE
0.1°W
38°53.5'N
RWY 18-36
S70, D125, ST159, DT210
A
358.1°
FIELD
ELEV
6264
B
36
38°53'N
AIRPORT DIAGRAM
09239
SOUTH LAKE TAHOE, CALIFORNIA
SOUTH LAKE TAHOE/ LAKE TAHOE (TVL)

09127

AIRPORT DIAGRAM

AL-407 (FAA)

STOCKTON METROPOLITAN (SCK)
STOCKTON, CALIFORNIA



AIRPORT DIAGRAM
09127

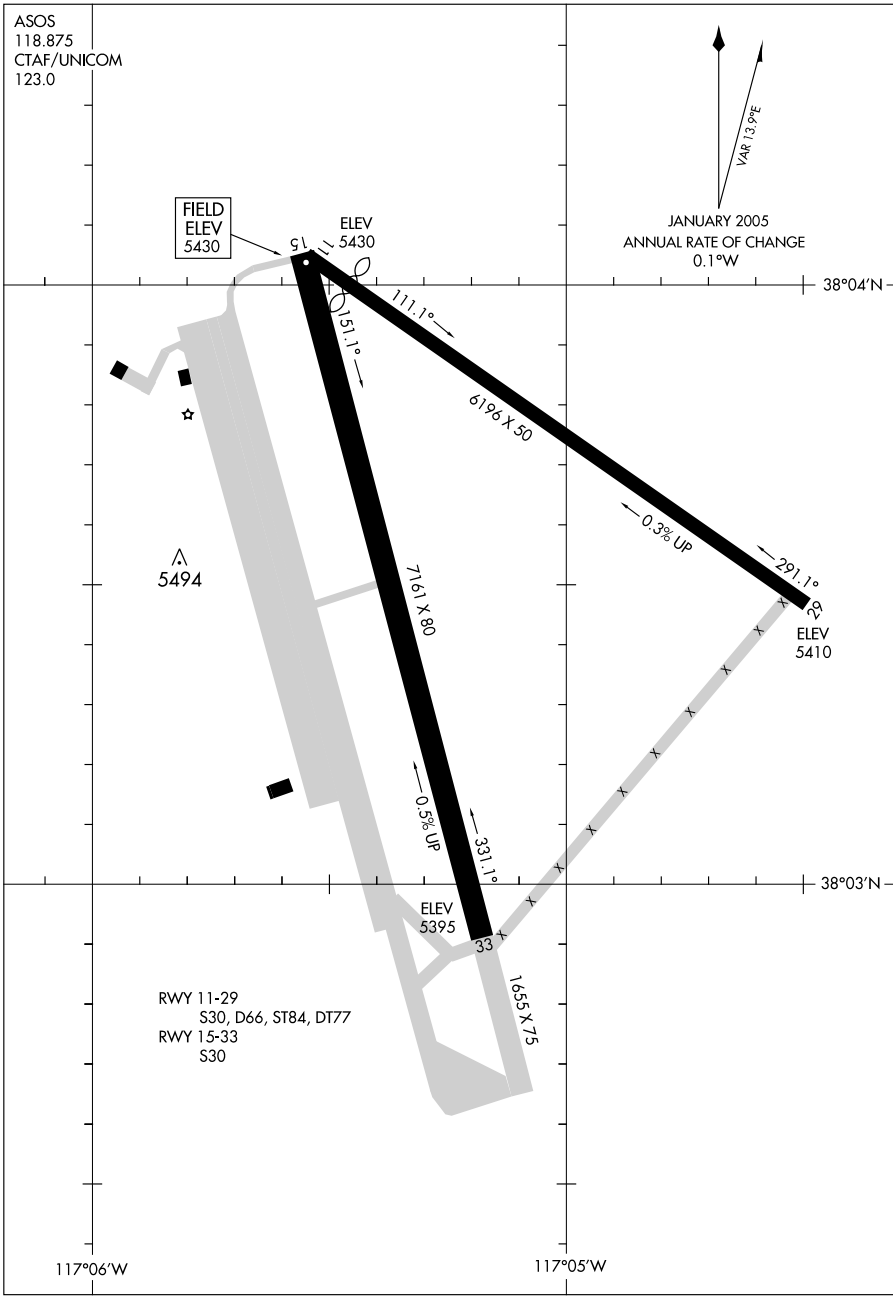
STOCKTON, CALIFORNIA
STOCKTON METROPOLITAN (SCK)

09239

AIRPORT DIAGRAM

AL-423 (FAA)

TONOPAH (TPH)
TONOPAH, NEVADA



AIRPORT DIAGRAM

09239

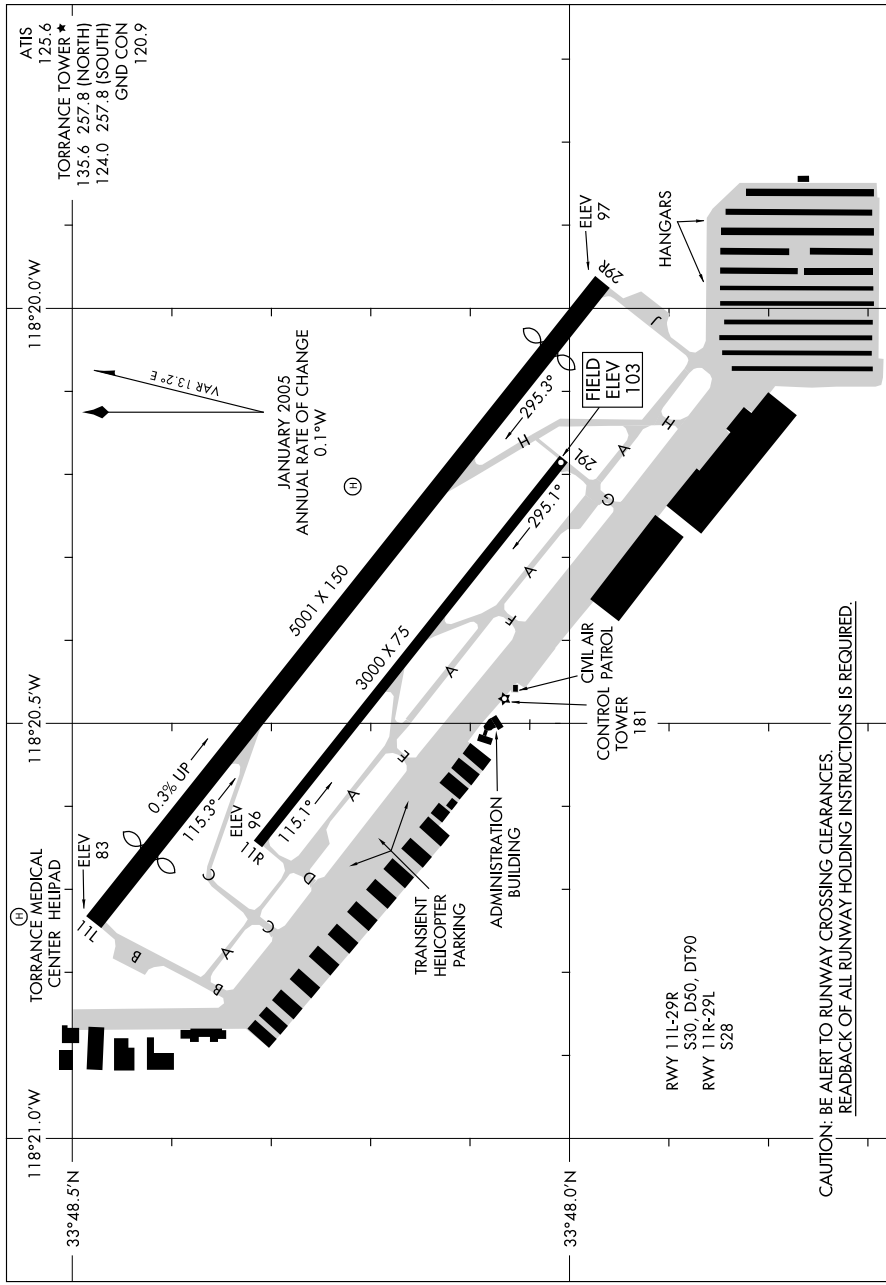
TONOPAH, NEVADA
TONOPAH (TPH)

09071

AIRPORT DIAGRAM

AL-5179 (FAA)

TORRANCE/ZAMPERINI FIELD (TOA)
TORRANCE, CALIFORNIA



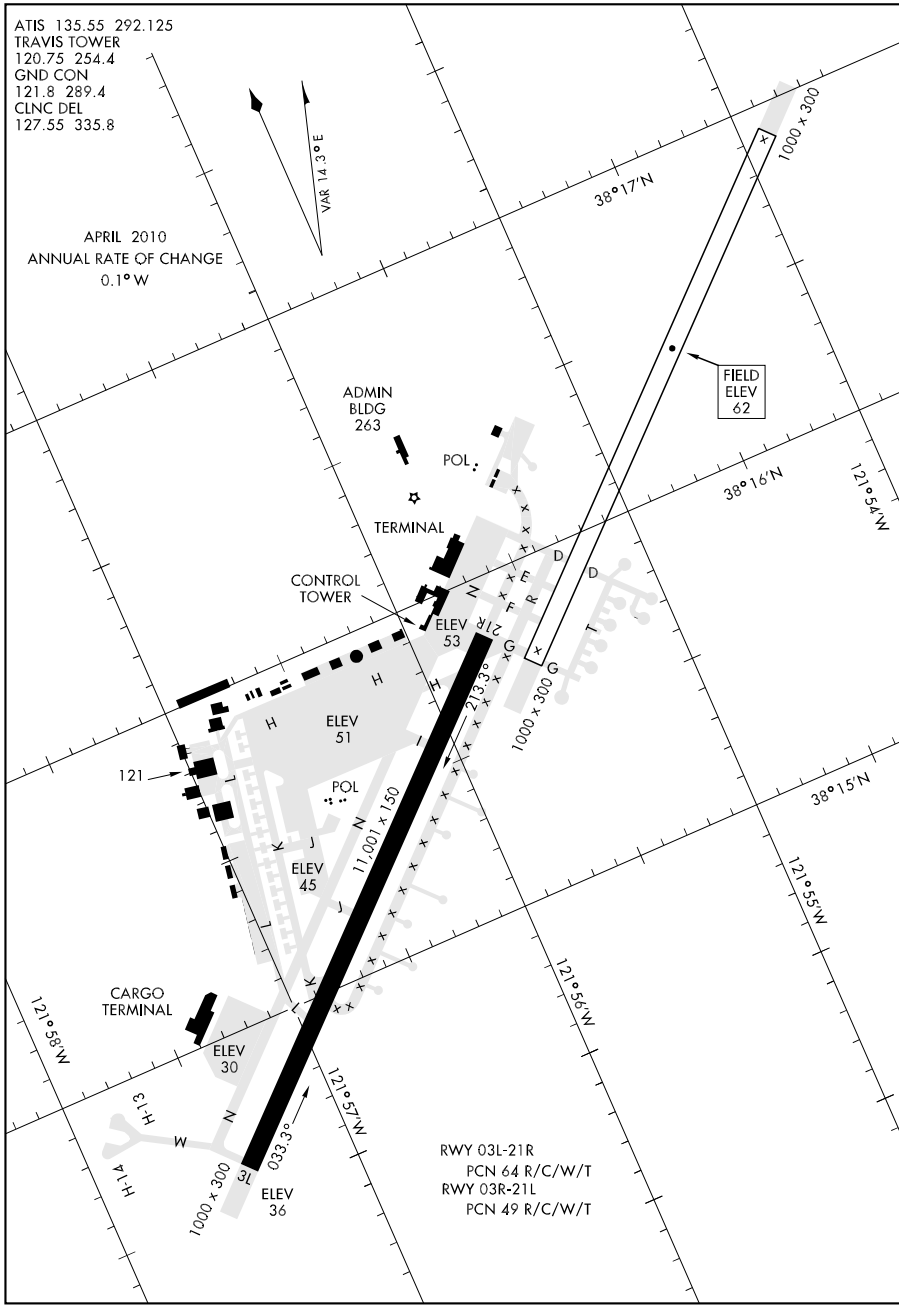
AIRPORT DIAGRAM
09071
TORRANCE, CALIFORNIA
TORRANCE/ZAMPERINI FIELD (TOA)

10098

AIRPORT DIAGRAM

[USAF] AFD-488

TRAVIS AFB (KSUU)
FAIRFIELD, CALIFORNIA



AIRPORT DIAGRAM

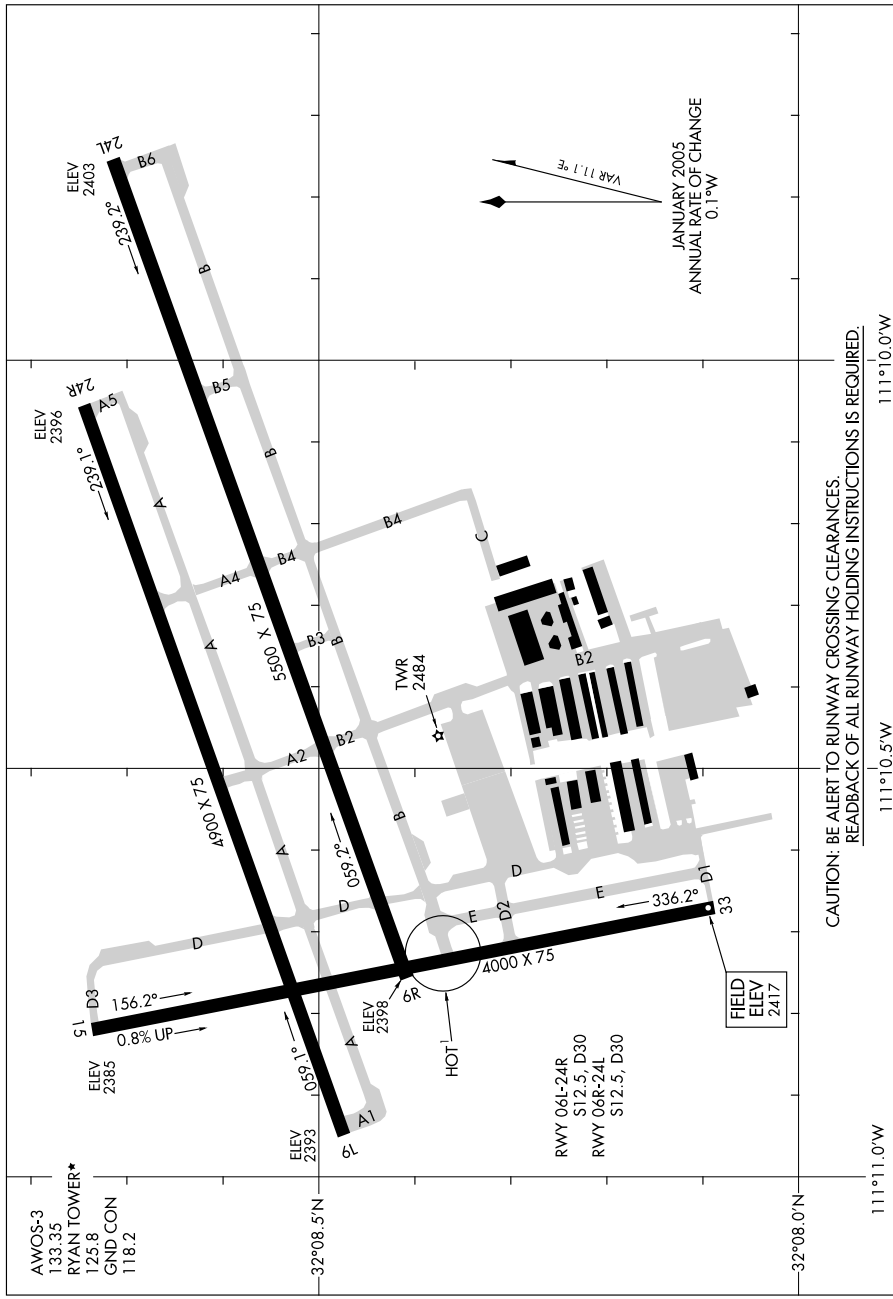
FAIRFIELD, CALIFORNIA
TRAVIS AFB (KSUU)

09351

AIRPORT DIAGRAM

AL-6513 (FAA)

TUCSON/RYAN FIELD (RYN)
TUCSON, ARIZONA



AIRPORT DIAGRAM

TUCSON, ARIZONA
TUCSON/RYAN FIELD (RYN)

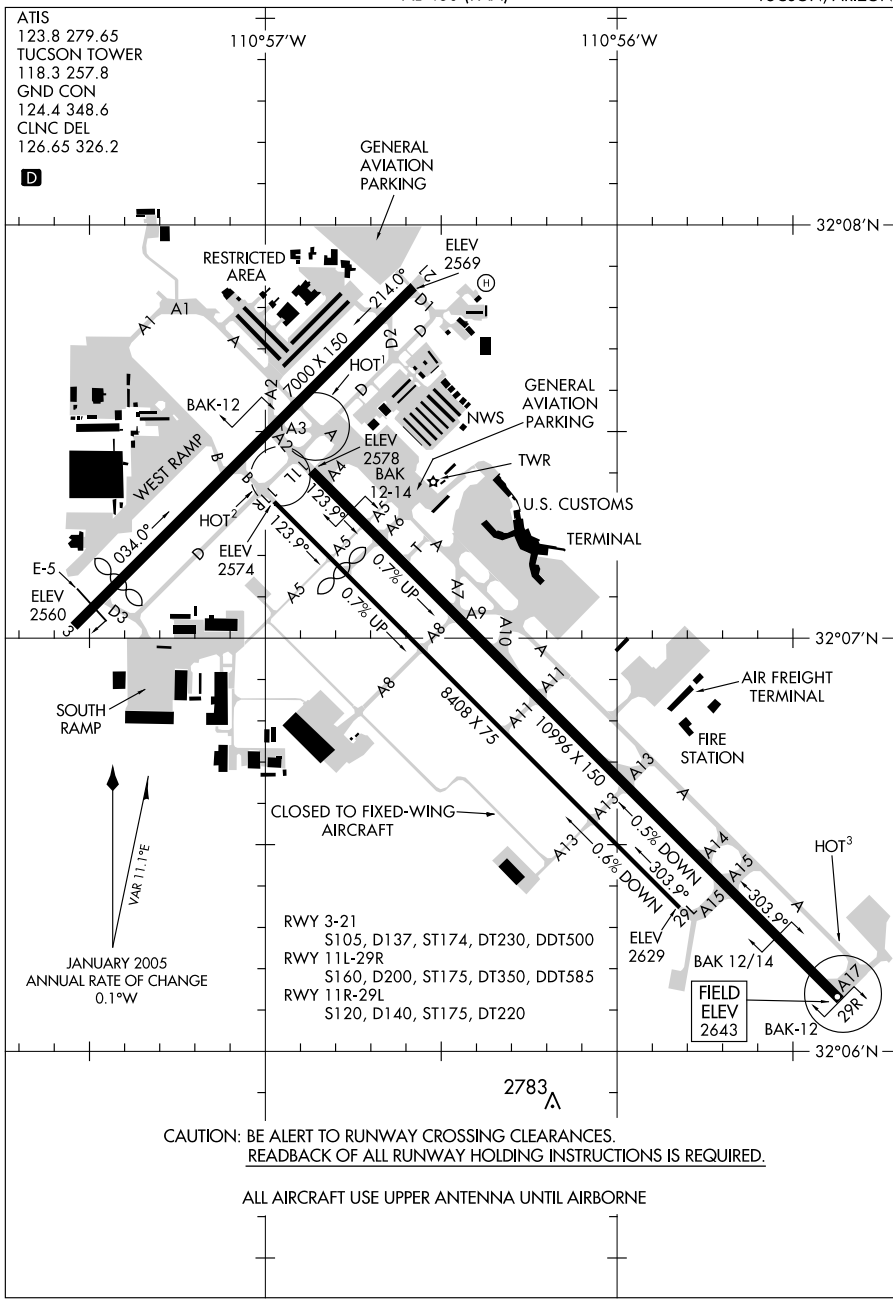
09351

09351

AIRPORT DIAGRAM

AL-430 (FAA)

TUCSON INTL (TUS)
TUCSON, ARIZONA



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

ALL AIRCRAFT USE UPPER ANTENNA UNTIL AIRBORNE

AIRPORT DIAGRAM
09351
TUCSON, ARIZONA
TUCSON INTL (TUS)

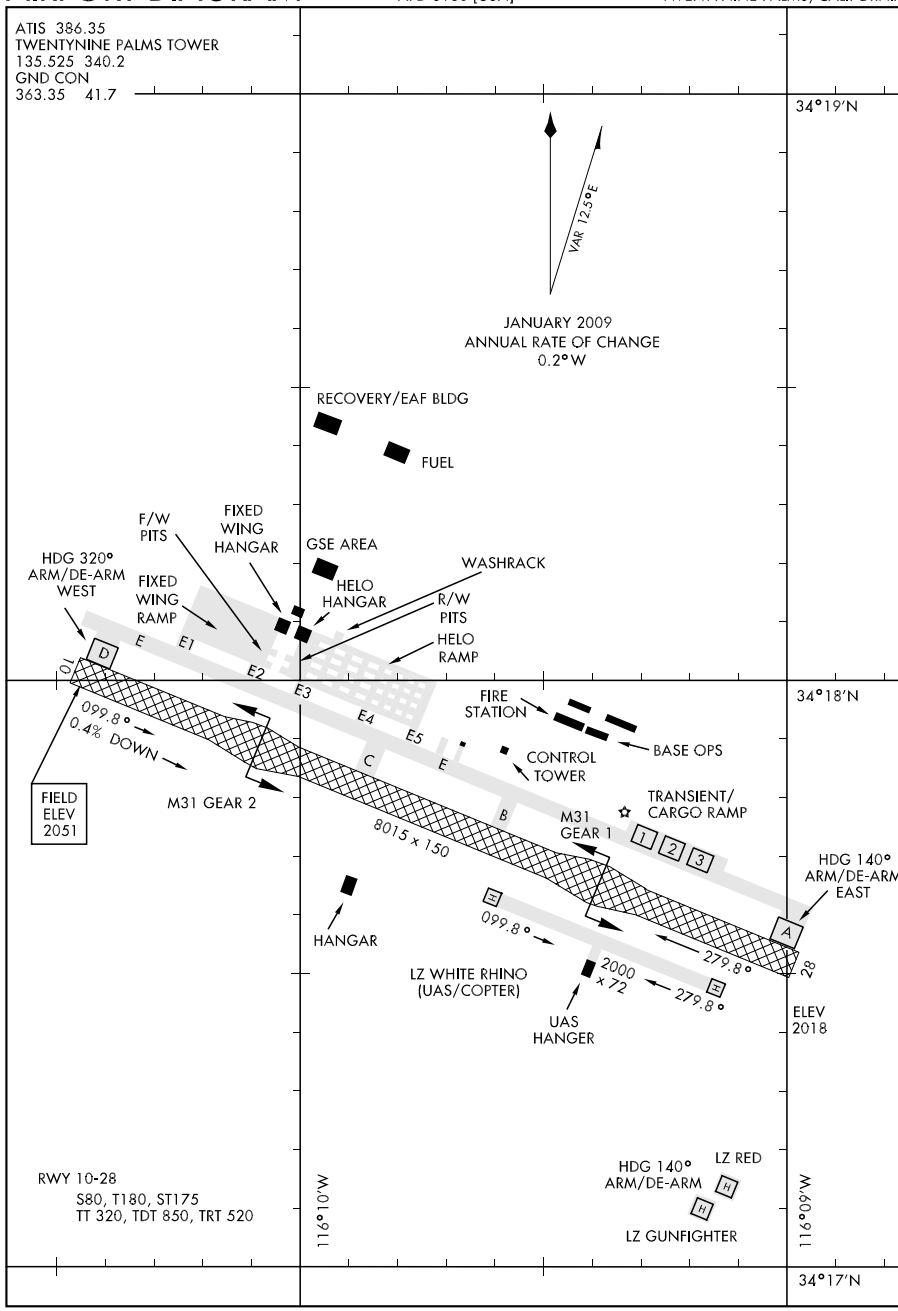
09015

AIRPORT DIAGRAM

AFD-3160 [USN]

TWENTYNINE PALMS SELF (KNXP)

TWENTYNINE PALMS, CALIFORNIA



AIRPORT DIAGRAM

TWENTYNINE PALMS, CALIFORNIA

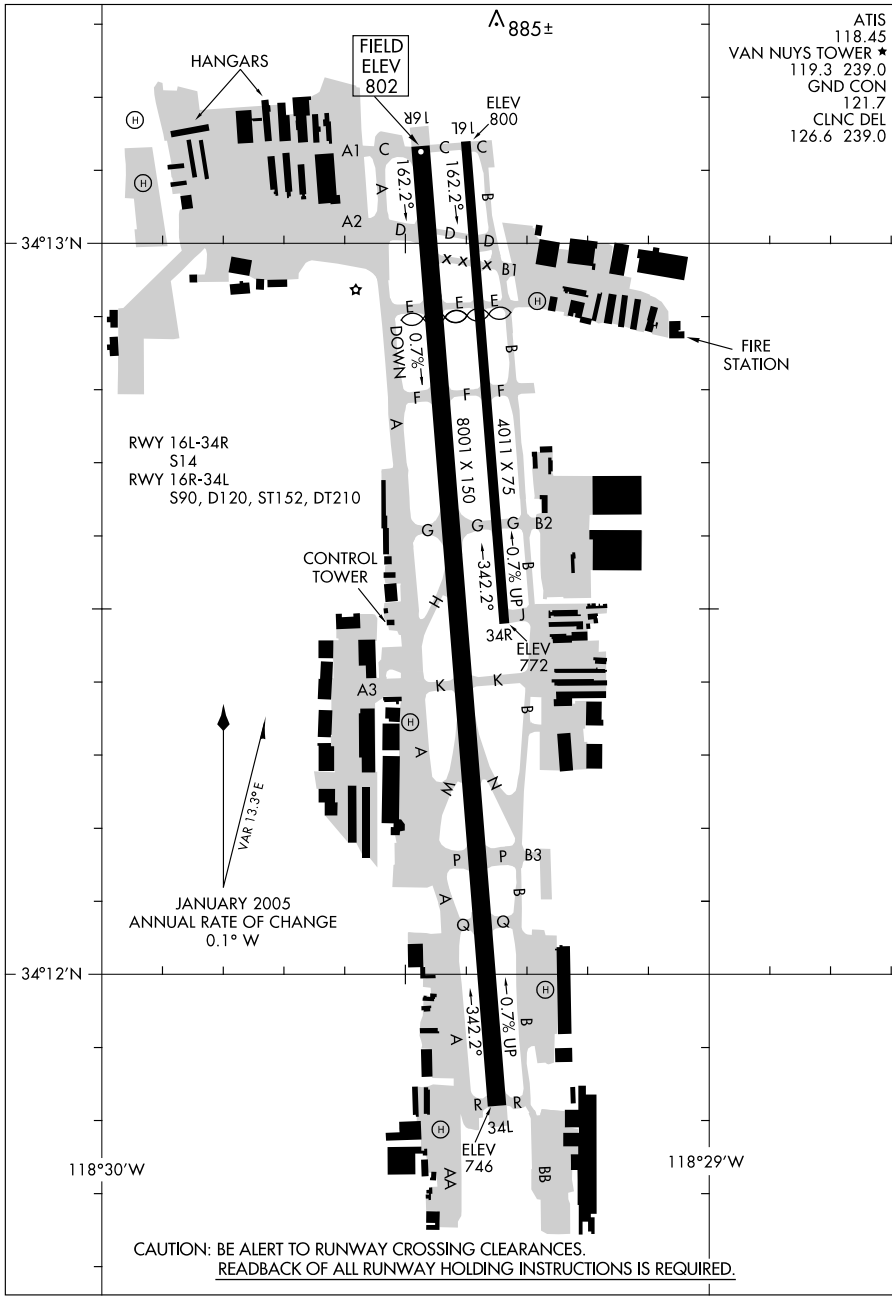
TWENTYNINE PALMS SELF (KNXP)

09183

AIRPORT DIAGRAM

AL-552 (FAA)

VAN NUYS (VNY)
VAN NUYS, CALIFORNIA



AIRPORT DIAGRAM

09183

VAN NUYS, CALIFORNIA
VAN NUYS (VNY)

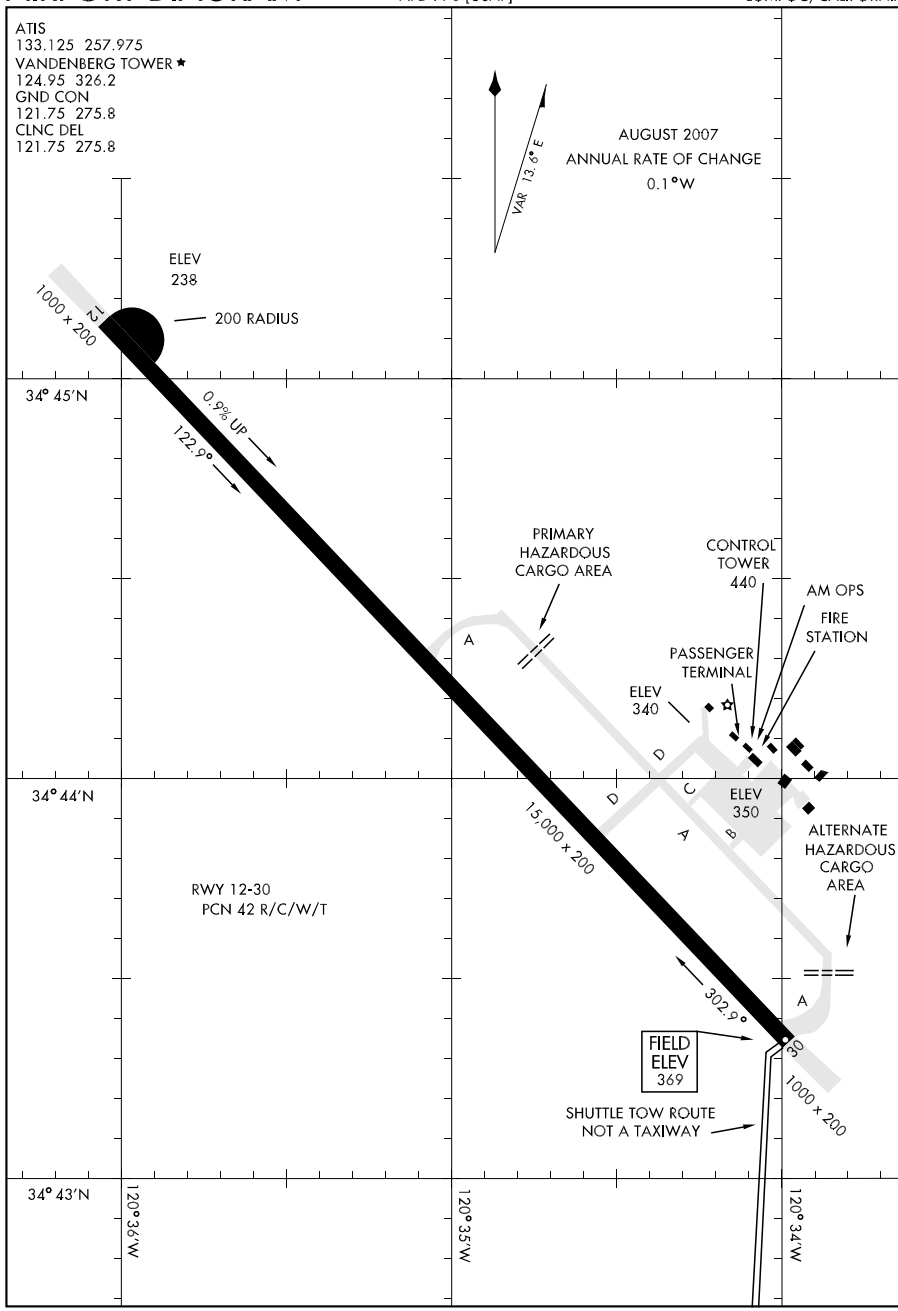
07242

AIRPORT DIAGRAM

VANDENBERG AFB (KVBG)

AFD-770 [USAF]

LOMPOC, CALIFORNIA



AIRPORT DIAGRAM

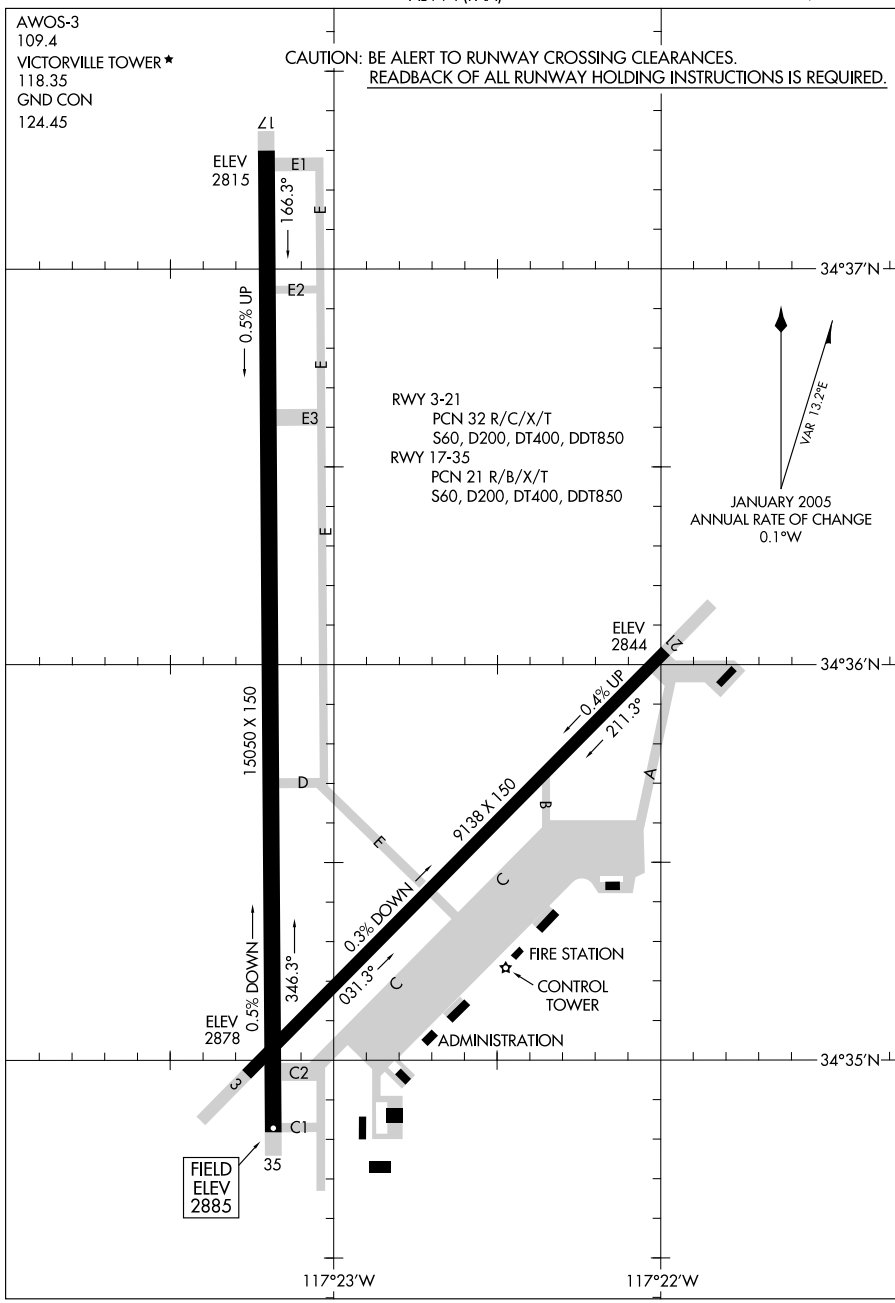
LOMPOC, CALIFORNIA

VANDENBERG AFB (KVBG)

09239

AIRPORT DIAGRAM

VICTORVILLE/SOUTHERN CALIFORNIA LOGISTICS (VCV)
AL-794 (FAA)
VICTORVILLE, CALIFORNIA



AIRPORT DIAGRAM

09239

VICTORVILLE, CALIFORNIA
VICTORVILLE/SOUTHERN CALIFORNIA LOGISTICS (VCV)

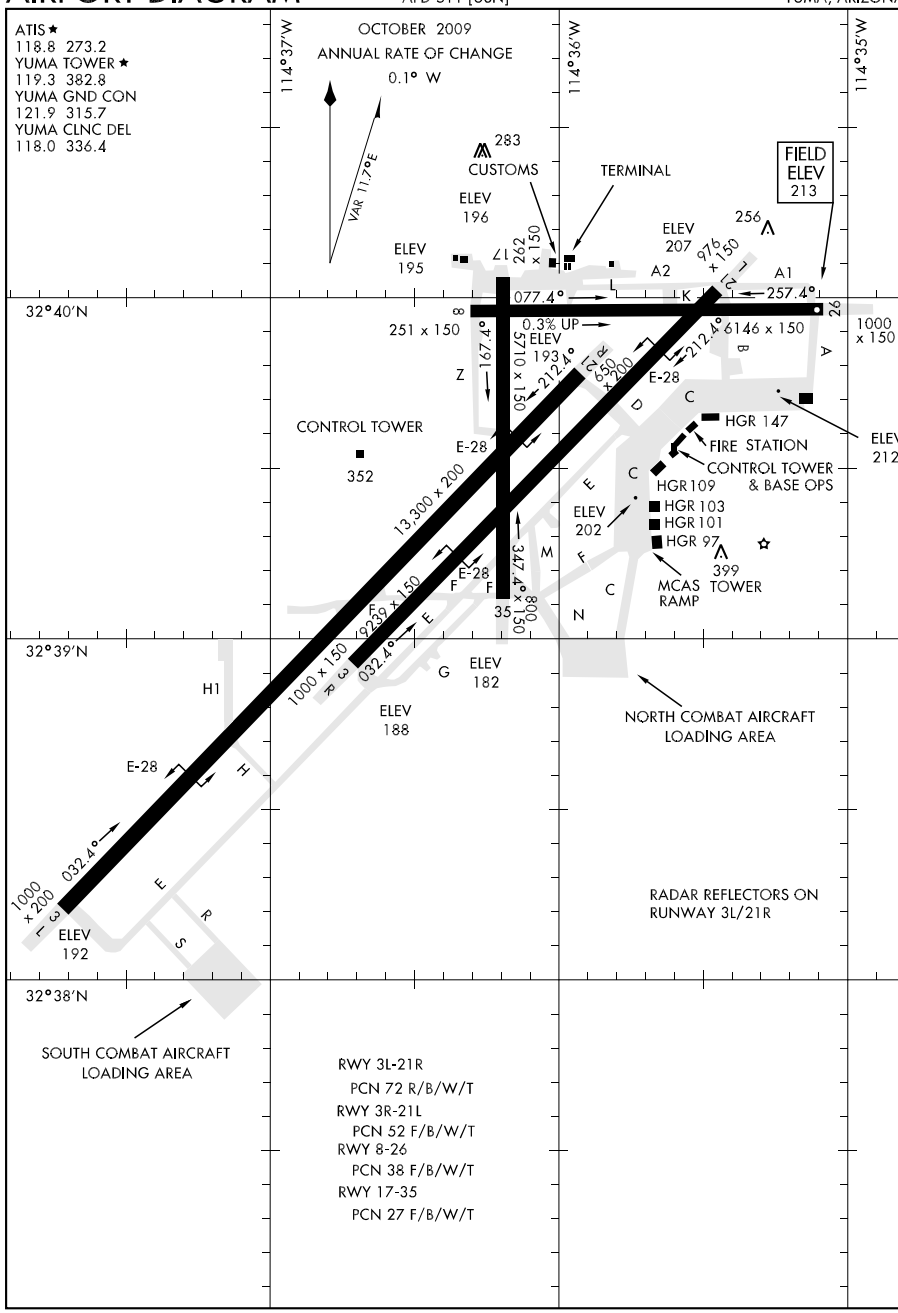
09295

AIRPORT DIAGRAM

YUMA MCAS/YUMA INTL (KNYL)

AFD-511 [USN]

YUMA, ARIZONA

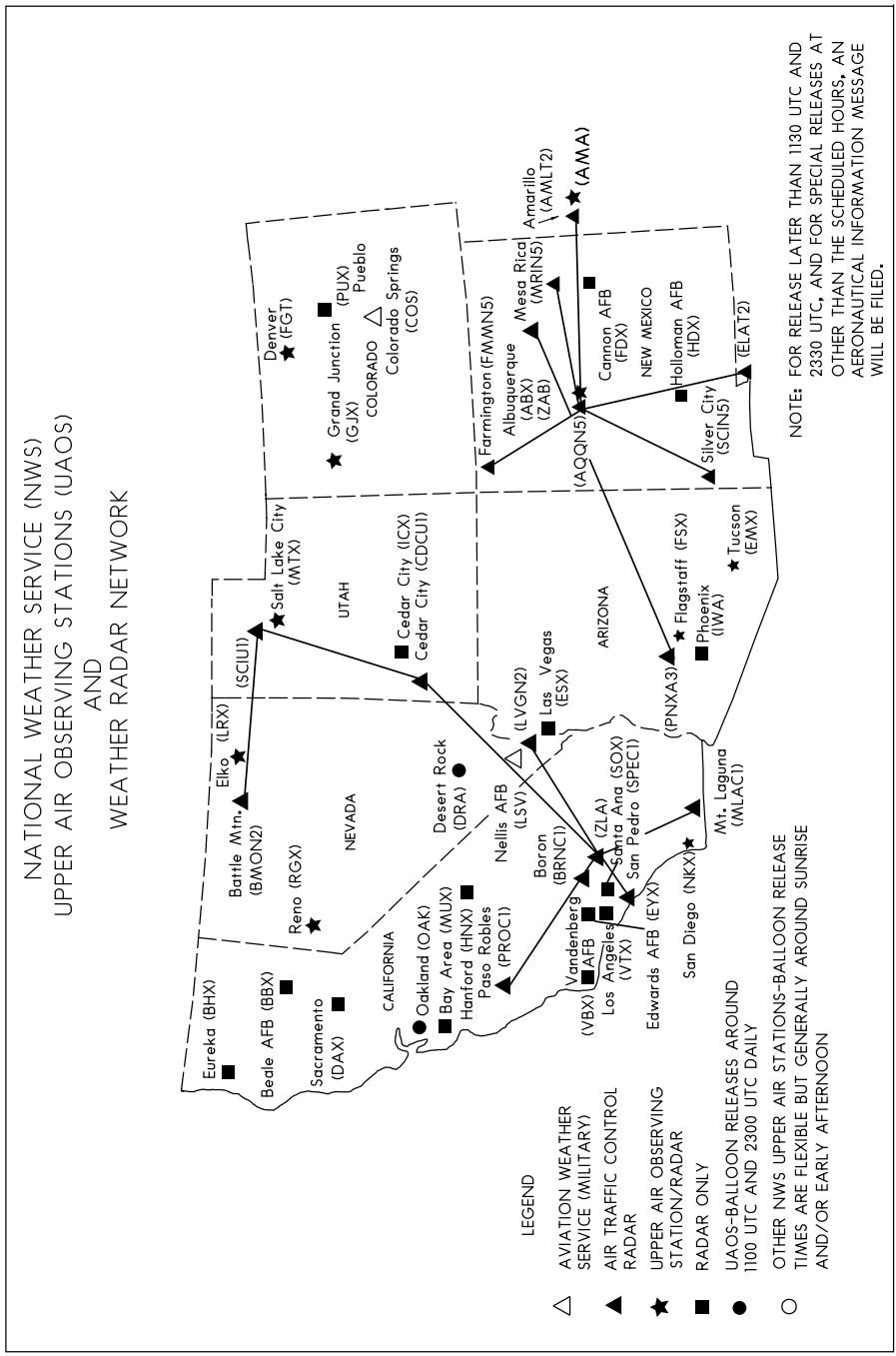


AIRPORT DIAGRAM

YUMA, ARIZONA

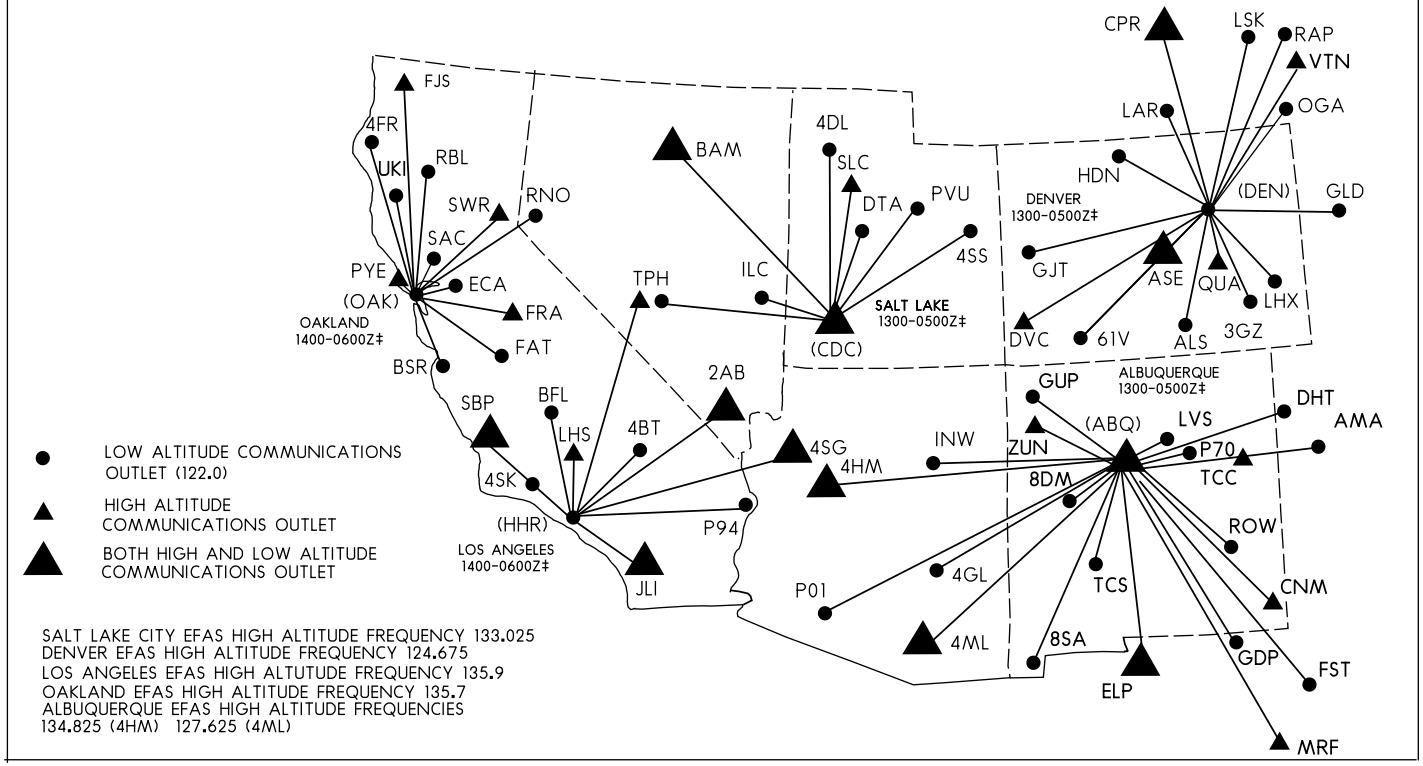
YUMA MCAS/YUMA INTL (KNYL)

INTENTIONALLY
LEFT
BLANK


NATIONAL WEATHER SERVICE (NWS)
UPPER AIR OBSERVING STATIONS (UAOS)
AND
WEATHER RADAR NETWORK
Eureka (BHX)
Beale AFB (BBX)
Sacramento (DAX)
CALIFORNIA
Oakland (OAK)
Bay Area (MUX)
Hanford (HNX)
Paso Robles (PROC1)
Battle Mtn. (BMON2)
Elko (LRX)
(SCIU1)
Reno (RGX)
NEVADA
Desert Rock (DRA)
Nellis AFB (LSV)
(LVGN2)
Las Vegas (ESX)
Boron (BRNC1)
Vandenberg AFB (VBX)
Los Angeles (VTX)
(ZLA)
Santa Ana (SOX)
San Pedro (SPEC1)
Edwards AFB (EYX)
San Diego (NKX)
Mt. Laguna (MLAC1)
Salt Lake City (MTX)
UTAH
Cedar City (ICX)
Cedar City (CDCU1)
(IPNXA3)
Flagstaff (FSX)
ARIZONA
Phoenix (IWA)
Tucson (EMX)
Denver (FGT)
Grand Junction (GJX)
(PUX) Pueblo
COLORADO
Colorado Springs (COS)
Farmington (FMMN5)
Albuquerque (ABX) (ZAB)
(AQQN5)
Mesa Rica (MRIN5)
Amarillo (AMLT2)
(AMA)
Cannon AFB (FDX)
NEW MEXICO
Holloman AFB (HDX)
Silver City (SCIN5)
(ELAT2)
NOTE: FOR RELEASE LATER THAN 1130 UTC AND 2330 UTC, AND FOR SPECIAL RELEASES AT OTHER THAN THE SCHEDULED HOURS, AN AERONAUTICAL INFORMATION MESSAGE WILL BE FILED.
LEGEND
AVIATION WEATHER SERVICE (MILITARY)
AIR TRAFFIC CONTROL RADAR
UPPER AIR OBSERVING STATION/RADAR
RADAR ONLY
UAOS-BALLOON RELEASES AROUND 1100 UTC AND 2300 UTC DAILY
OTHER NWS UPPER AIR STATIONS-BALLOON RELEASE TIMES ARE FLEXIBLE BUT GENERALLY AROUND SUNRISE AND/OR EARLY AFTERNOON

ENROUTE FLIGHT ADVISORY SERVICE (EFAS)

See Aeronautical Information Manual (AIM) for available services



SALT LAKE CITY EFAS HIGH ALTITUDE FREQUENCY 133.025
DENVER EFAS HIGH ALTITUDE FREQUENCY 124.675
LOS ANGELES EFAS HIGH ALTUTUDE FREQUENCY 135.9
OAKLAND EFAS HIGH ALTITUDE FREQUENCY 135.7
ALBUQUERQUE EFAS HIGH ALTITUDE FREQUENCIES
134.825 (4HM) 127.625 (4ML)